





Highlights

- Designed for machine-oriented use
- Long-term availability of components
- Developed in accordance with the requirements of automation technology
- Appealing industrial design housings

Industrial PC PC Control for all applications

▶ www.beckhoff.com/IPC



Product overviews System description

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Product overview Industrial PC

Industrial PCs											
	Compact	Compact	3 ¹ / ₂ -inch		3 ¹ / ₂ -inch		3½-inch	ATX		Control Pa	nel
	motherboard	motherboard	motherboai	ď	motherboa	rd	motherboard	motherboa	rd		
	Intel [®] Core™	Intel [®] Atom™	Intel [®] Core™		Intel [®] Atom	тмј	ARM	Intel [®] Core	Intel [®] Core™		
					Celeron® UI	V	Cortex™-A8				
Multi-touch Panel			CP22xx	34	CP27xx	42	CP26xx 38			CP29xx	150
PCs/Control Panels			CP32xx	46	CPX27xx	43				CPX29xx	152
					CP37xx	50				CP39xx	154
					CPX37xx	51				CPX39xx	153
Single-touch Panel		CP77xx 80	CP62xx	54	CP67xx	70	CP66xx 64	CP65xx	60	CP69xx	166
PCs/Control Panels			CP72xx	76				C36xx	84	CP79xx	170
19-inch slide-in			C5210	90				C5240	91		
Industrial PCs											
				_					_		
Control cabinet	C6030 96	C6015 94	C6920	122		120		C6140	100		
Industrial PCs		C6017 95	C6930	125		121		C6150	101		
			C6515	108	C6925	124		C6240	104		
			C6525	110				C6250	105		
								C6640	114		
								C6650	115		

Control cabinet industrial server

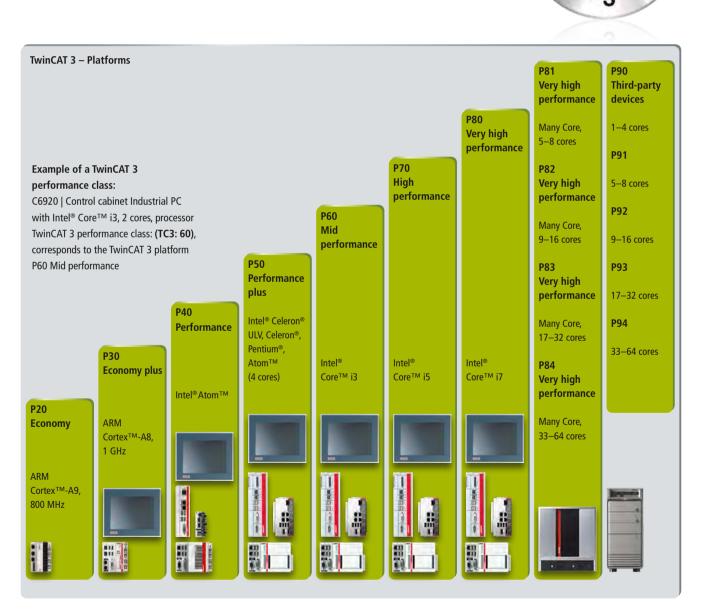
SSI EEB motherboard 2 x Intel® Xeon® C6670

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Product overview TwinCAT 3

The TwinCAT 3 runtime components are available for different platforms. The platform levels correspond to the various TwinCAT 3 performance classes of the Beckhoff PCs. The TwinCAT 3 performance class of a Beckhoff PC depends on the configuration and the technical data of the PC (including the processor).

The following overview shows the various TwinCAT 3 platforms. The controllers integrated in the platform classifications represent sample configurations. The TwinCAT 3 performance class required for a TwinCAT 3 Runtime component can be found in the product description of the respective Beckhoff PC.



The controllers integrated in the platform categorisation are only example configurations.

For further information on TwinCAT 3 see page 470 or ► www.beckhoff.com/TwinCAT3

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Twin**CAT***

Product overview multi-touch Panel PCs











СР37хх

Multi-touch built-in Panel PCs, front side IP 65

	Display	7-inch	12-inch	12.1-inch	15-inch	15.6-inch	18.5-inch	19-inch	21.5-inch	24-inch	
	Resolution	800 x 480	800 x 600	1280 x 800	1024 x 768	1366 x 768	1366 x 768	1280 x 1024	1920 x 1080	1920 x 1080	
	Format	5:3	4:3	16:9	4:3	16:9	16:9	5:4	16:9	16:9	
CP22xx	multi-finger		CP2212		CP2215	CP2216	CP2218	CP2219	CP2221	CP2224	34
– up to Intel®	touch screen										
Core™											
i3/i5/i7											
CP26xx	dual-finger	CP2607	CP2612	CP2613	CP2615	CP2616	CP2618	CP2619	CP2621	CP2624	38
– ARM	touch screen										
Cortex [™] -											
A8											
CP27xx	multi-finger		CP2712	CP2713	CP2715	CP2716	CP2718	CP2719	CP2721	CP2724	42
– Intel®	touch screen,				CPX2715			CPX2719	CPX2721		43
Celeron™	only										
ULV or	horizontal										
Atom™											

Multi-touch	Multi-touch Panel PCs, all sides IP 65												
	Display Resolution	7-inch 800 x 480	12-inch 800 x 600	12.1-inch 1280 x 800	15-inch 1024 x 768	15.6-inch 1366 x 768	18.5-inch 1366 x 768	19-inch 1280 x 1024	21.5-inch 1920 x 1080	24-inch 1920 x 1080			
	Format	5:3	4:3	16:9	4:3	16:9	16:9	5:4	16:9	16:9			
CP32xx – up to Intel® Core™ i3/i5/i7	multi-finger touch screen, only horizontal		CP3212		CP3215	CP3216	CP3218	CP3219	CP3221	CP3224	46		
CP37xx – Intel® Atom™	multi-finger touch screen, only horizontal		CP3712	CP3713	CP3715 CPX3715	CP3716	CP3718	CP3719 CPX3719	CP3721 CPX3721	CP3724	50 51		

Product overview multi-touch Control Panels





Multi-touch built-in Control Panels, front side IP 65

	Display	7-inch	12-inch	12.1-inch	15-inch	15.6-inch	18.5-inch	19-inch	21.5-inch	24-inch	
	Resolution	800 x 480	800 x 600	1280 x 800	1024 x 768	1366 x 768	1366 x 768	1280 x 1024	1920 x 1080	1920 x 1080	
	Format	5:3	4:3	16:9	4:3	16:9	16:9	5:4	16:9	16:9	
CP29xx-0000 – DVI/USB	multi-finger touch screen	CP2907- 0000	CP2912- 0000	CP2913-	CP2915- 0000	CP2916- 0000	CP2918- 0000	CP2919- 0000	CP2921- 0000	CP2924- 0000	150
Extended interface*	touch screen	0000	0000	0000	CPX2915- 0000	0000	0000	CPX2919- 0000	CPX2921- 0000	0000	152
CP29xx-0010 – CP-Link 4*	multi-finger touch screen	CP2907- 0010	CP2912- 0010	CP2913- 0010	CP2915- 0010	CP2916- 0010	CP2918- 0010	CP2919- 0010	CP2921- 0010	CP2924- 0010	150

Multi-touch	Control Pa	nels, all si	des IP 65								
	Display	7-inch	12-inch	12.1-inch	15-inch	15.6-inch	18.5-inch	19-inch	21.5-inch	24-inch	
	Resolution	800 x 480	800 x 600	1280 x 800	1024 x 768	1366 x 768	1366 x 768	1280 x 1024	1920 x 1080	1920 x 1080	
	Format	5:3	4:3	16:9	4:3	16:9	16:9	5:4	16:9	16:9	
CP39xx-0000	multi-finger	CP3907-	CP3912-	CP3913-	CP3915-	CP3916-	CP3918-	CP3919-	CP3921-	CP3924-	154
– DVI/USB	touch screen	0000	0000	0000	0000	0000	0000	0000	0000	0000	
Extended											
interface*											
CP39xx-0010	multi-finger	CP3907-	CP3912-	CP3913-	CP3915-	CP3916-	CP3918-	CP3919-	CP3921-		154
– CP-Link 4*	touch screen	0010	0010	0010	0010	0010	0010	0010	0010	0010	
					CPX3915-			CPX3919-	CPX3921-		153
					0010			0010	0010		

*For further information on CP-Link 4 see page 147 , for further information on DVI/USB Extended see page 164

Product overview single-touch panels













Single-touch built-in Panel PCs, front side IP 54/65

	Display	5.7-inch	6.5-inch	7-inch	10.1-inch	12-inch	15-inch	19-inch	
	Resolution	640 x 480	640 x 480	800 x 480	1024 x 600	800 x 600	1024 x 768	1280 x 1024	
	Format	4:3	4:3	5:3	17:10	4:3	4:3	5:4	
	Protect. class front	IP 65	IP 65	IP 54	IP 54	IP 65	IP 65	IP 65	
CP62xx	without keys					CP6201	CP6202	CP6203	54
– 3½-inch	function keys					CP6211	CP6212	CP6213	
motherboard	numerical					CP6221	CP6222	CP6223	
– up to Intel [®] Core [™]	alphanumerical					CP6231	CP6232	CP6233	
i3/i5/i7							CP6242		
CP65xx	without keys					CP6501	CP6502	CP6503	60
 ATX motherboard 	function keys					CP6511	CP6512	CP6513	
– up to Intel [®] Core [™]	numerical					CP6521	CP6522	CP6523	
i3/i5/i7	alphanumerical					CP6531	CP6532	CP6533	
 7 slots free 							CP6542		
CP66xx	without keys	CP6607	CP6609			CP6601	CP6602	CP6603	64
— 3½-inch	function keys		CP6619			CP6611	CP6612	CP6613	
motherboard	numerical		CP6629			CP6621	CP6622	CP6623	
– ARM Cortex [™] -A8	alphanumerical					CP6631	CP6632	CP6633	
CP6606, CP6600 – 3½-inch motherboard – ARM Cortex™-A8	without keys			CP6606	CP6600				67
CP67xx	without keys	CP6707				CP6701	CP6702	CP6703	70
– 3½-inch	function keys					CP6711	CP6712	CP6713	
motherboard	numerical					CP6721	CP6722	CP6723	
– Intel® Celeron™	alphanumerical					CP6731	CP6732	CP6733	
ULV or Atom™							CP6742		
CP6706, CP6700	without keys			CP6706	CP6700				73
– 3½-inch									
motherboard									
– Intel® Celeron™									
ULV or Atom™									
СЗбхх	without keys					C3620	C3640		84
 ATX motherboard 									
– up to Intel [®] Core™									
i3/i5/i7									
 7 slots free 									







Numeric keyboard



Alphanumeric

. keyboard



With PLC keys on the sides



CP72xx









CP790x-14xx, stainless steel

Single-touch Panel PCs, all sides IP 65

	Display	5.7-inch	6.5-inch	7-inch	10.1-inch	12-inch	15-inch	19-inch	
	Resolution	640 x 480	640 x 480	800 x 480	1024 x 600	800 x 600	1024 x 768	1280 x 1024	
	Format	4:3	4:3	5:3	17:10	4:3	4:3	5:4	
CP72xx	without keys					CP7201	CP7202	CP7203	76
– 3½-inch	function keys					CP7211	CP7212	CP7213	
motherboard	numerical					CP7221	CP7222	CP7223	
– up to Intel [®] Core™	alphanumerical					CP7231	CP7232	CP7233	
i3/i5/i7							CP7242		
CP77xx	without keys					CP7701	CP7702	CP7703	80
 – CP motherboard 	function keys					CP7711	CP7712	CP7713	
 Intel[®] Celeron[®] 	numerical					CP7721	CP7722	CP7723	
ULV	alphanumerical					CP7731	CP7732	CP7733	

Single-touch built-in Control Panels, front side IP 54/65

	Display	5.7-inch	6.5-inch	7-inch	10.1-inch	12-inch	15-inch	19-inch	
	Resolution	640 x 480	640 x 480	800 x 480	1024 x 600	800 x 600	1024 x 768	1280 x 1024	
	Format	4:3	4:3	5:3	17:10	4:3	4:3	5:4	
	Protect. class front	IP 65	IP 65	IP 54	IP 54	IP 65	IP 65	IP 65	
CP69xx	without keys	CP6907	CP6909	CP6906	CP6900	CP6901	CP6902	CP6903	166
– DVI/USB Extended	function keys		CP6919			CP6911	CP6912	CP6913	
interface*	numerical		CP6929			CP6921	CP6922	CP6923	
	alphanumerical					CP6931	CP6932	CP6933	
							CP6942		

Single-touch Control Panels, all sides IP 65

									j i
	Display	5.7-inch	6.5-inch	7-inch	10.1-inch	12-inch	15-inch	19-inch	
	Resolution	640 x 480	640 x 480	800 x 480	1024 x 600	800 x 600	1024 x 768	1280 x 1024	
	Format	4:3	4:3	5:3	17:10	4:3	4:3	5:4	
CP79xx	without keys		CP7909			CP7901	CP7902	CP7903	170
– DVI/USB Extended	function keys		CP7919			CP7911	CP7912	CP7913	
interface*	numerical		CP7929			CP7921	CP7922	CP7923	
	alphanumerical					CP7931	CP7932	CP7933	
							CP7942		
CP79xx-14xx	without keys,					CP7901-	CP7902-	CP7903-	170
– DVI/USB Extended	stainless steel					14xx	14xx	14xx	
interface*	housing								

*For further information on DVI/USB Extended see page 164

We reserve the right to make technical changes.

BECKHOFF New Automation Technology

Product overview control cabinet Industrial PCs







with PCIe module slots

C65x5





C6525 with plug-in card slots









C60xx



C69x0 with plug-in card slots

Control cabinet Industrial PCs with 3½-inch motherboard

C5210

	Processor	Intel® Atom™	Intel® Celeron® ULV	Intel® Celeron®, Intel® Core™ i3/i5/i7 4 th Generation	Intel® Celeron®, Intel® Core™ i3/i5/i7 6 th /7 th Generation	
C5210, 19-inch slide-in Industrial PCs	1 rack unit			C5210-0020	C5210-0030	90
C65xx	fanless			C6515-0050	C6515-0060	108
	RAID			C6525-0050	C6525-0060	110
C69xx, compact	fanless	C6905-0010				120
Industrial PCs, connectors on front	fanless, 1 CFast card slot	C6915-0010				121
	fanless, 2 PCIe module slots	C6925-0030	C6925-0020			124
	optional plug-in card slots			C6920-0050	C6920-0060	122
	2 PCIe module slots, optional plug-in card slots			C6930-0050	C6930-0060	125

Ultra-compact control cabinet Industrial PCs with compact industrial motherboard

	Processor	Intel® Atom™	Intel® Celeron®, Intel® Pentium®, Intel® Core™ i3/i5/i7 6th/7th Generation	
C60xx,	fanless,	C6015-0010		94
ultra-compact	without slots			
Industrial PCs	optional interfaces	C6017-0010		95
	and/or an optional			
	1-second UPS			
	up to 2 M.2 SSDs		C6030-0060	96

Embedded PCs see page 184

BECKHOFF New Automation Technology



Control cabinet Industrial PCs with ATX motherboard

C5240, 19-inch slide-in Industrial PCs	Processor 7 slots, 4 rack units	Intel® Pentium®, Intel® Core™ i3/i5/i7 4 th Generation C5240-0000	Intel® Pentium®, Intel® Core™ i3/i5/i7 6 th /7 th Generation C5240-0010	91
C61xx, connectors on top	7 slots	C6140-0060 C6150-0060	C6140-0070 C6150-0070	100 101
C62xx, connectors on front	7 slots	C6240-0060 C6250-0070	C6240-0070 C6250-0080	104 105
C6640/C6650, connectors on top	7 slots	C6640-0040	C6640-0050	114
	7 slots, 2 removable frames	C6650-0040	C6650-0050	115

Control cabinet industrial server with SSI EEB motherboard				
	Processor	2 x Intel® Xeon®	2 x Intel [®] Xeon [®] Scalable	
C6670	6 slots, 2 removable frames	C6670-0000	C6670-0010	117

The right Industrial PC for every application



Panel PCs

Industrial PC

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A Beckhoff Panel PC consisting of a Control Panel and an Industrial PC is suitable for control cabinet installation (CP2xxx, CP6xxx) or mounting arm installation (CP3xxx, CP7xxx). High-performance components make machine-level operation, control and monitoring one of the strengths of the Beckhoff Panel PCs, whose elegant housings are designed for easy accessibility of all components and optimal space utilisation. Different display sizes between 5.7-inch and 24-inch and various add-on PCs with processors ranging from Intel[®] Atom[™] to Core[™] i7 can be combined to form tailored high-performance platforms for machine construction and plant engineering applications.

Control cabinet Industrial PCs

Beckhoff Industrial PCs for control cabinet installation can be scaled in size (bus coupler format up to ATX PC) and performance class (Intel[®] Atom[™] to Core[™] i7), depending on the application. The Industrial PC technology represents a balance between the latest PC technology and long-term component availability. In addition, the different product lines are characterised by adaptation to the special circumstances in industrial applications.

See page 30

See page 86

www.beckhoff.com/Panel-PC

www.beckhoff.com/Control-cabinet-PC



Control Panels

The Beckhoff Control Panels used as human-machine interfaces in conjunction with the high-performance Industrial PCs round off a system through their elegant design and the latest PC technology. The display sizes between 5.7-inch and 24-inch meet almost any industrial application requirements and are suitable for mounting arm installation (CP3xxx and CP7xxx) or wall installation (CP2xxx and CP6xxx). A wide range of different push-button extensions in conjunction with custom housing designs enable the Control Panel as the visual front end of a system or machine to be tailored to match the corporate identity.



Accessories

Beckhoff accessories complement the Industrial PCs while complying with industrial standards: CP-Link 3 desktop transfer software, DVI splitters, USB extensions and hubs, USB CFast slot, USB Ethernet controllers, battery packs, USB sticks, PCIe modules, plug-in cards.

Industrial PC accessories see page 127

Extensions for Control Panels and Panel PCs: push-button extensions (with electromechanical buttons, switches and indicator lamps), auxiliary keyboards, keyboard shelves, touch screen pens, RFID readers

Multi-touch Control Panel accessories see page 156 Single-touch Control Panel accessories see page 172



www.beckhoff.com/IPC-accessories

www.beckhoff.com/ControlPanel





Requirements for PC-based control technology

Balance between latest PC technology and long-term availability of control components

The personal computer has experienced an unprecedented success story and has become a firmly established part of everyday life, including industrial environments. Together with associated software, PCs in different shapes and forms are at the core of a wide range of diverse automation tasks such as control of machines, processes or logistics systems, networking of system components, data acquisition, or image processing. For classic control tasks, PC-based control technology offers excellent scalability and flexibility and is therefore increasingly used in place of hardware PLCs.

Beckhoff is one of the pioneers of PC-based automation: the first PC control system was delivered as early as 1986. Beckhoff Industrial PCs are characterised by a wealth of technology know-how accumulated over recent years. In combination with the TwinCAT automation software, they offer a high-performance control system for PLC, NC and CNC functionalities.

An important feature of the Beckhoff product philosophy is the use of advanced, high-performance components and processors for the development and design of Industrial PCs: they integrate the latest developments offered by the technology market and are used successfully worldwide. Fine scaling is provided for through processor incrementing from Intel[®] Atom[™] and Intel[®] Core[™] i7 to Intel[®] Xeon[®]. Due to the low processor power dissipation, Intel[®] Atom[™] processors enable extremely small, fanless controllers and are to be found in the lower price range.

In addition to long-standing experience, another factor driving the development of our comprehensive IPC product portfolio is customer-orientation. More than ten Industrial PC series with a wide range of basic PC types form the basis of our product range. The optimally tailored control computer can be found for every application from the large choice of devices and options.

The PC housing varies in size between Bus Coupler format and ATX PC, depending on the device type. In addition to long-term availability of the built-in processors and motherboards, Beckhoff also offers full commissioning of all integrated components, including software and different drives. Customised solutions can also be realised for optimum adaptation to the respective task.

Elegant Control Panels and Panel PCs

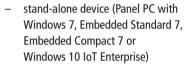
The Industrial PC is complemented by a Control Panel for the machine operator. The Beckhoff Control Panels and Panel PCs are the visual front end for machines or plants. Spatial separation of display/control unit and control computer offers maximum flexibility. Appealing design, robustness and suitability for industrial applications were important criteria in the development of the Control Panel series, which comes with display sizes between 5.7" and 24".

All displays can be fully tailored to customer requirements: options include visual adaptation to the corporate design or application of a customer logo a wide range of special mechanical keys, emergency stop switches, card scanners or RFID readers.

The Control Panel housing is made from high-quality solid aluminium and is suitable for protection class IP 65, as usually required in industrial environments. Thorough development and integration of electronic modules, displays, touch screens and front membranes ensure high availability and reliability during operation. All Beckhoff Control Panels can optionally be operated as:







- DVI/USB Extended Control Panel for direct or indirect operation at the PC (distance up to 50 m)
- CP-Link 3 (Panel PCs connected to the host PC via Ethernet), see page 140
- CP-Link 4 Control Panel for operation at the PC with a distance of up to 100 m, see page 147

Careful selection of components

A great deal of attention and care is put into the development and choice of the IPC components used, their compatibility, their long-term availability, mechanical loading capacity and industrial suitability. In developing electronic modules, Beckhoff fulfils the high requirements for Industrial PC components that are necessary in order to ensure permanent reliable operation.

Beckhoff is the developer and manufacturer of the motherboards in the Industrial PCs. The BIOS for the motherboards even has its own development department. In addition to that, 24 V DC power supplies with integrated UPS, Ethernet adapters and Ethernet switches, Fieldbus Cards, DVI display interfaces, DVI/USB extensions and USB hubs are produced by Beckhoff's own development and manufacturing facilities. International standards and experience in the application of PC systems under difficult industrial conditions provide the basis for Beckhoff system integration. Only a few LC displays, plug-in cards or hard disks are suited to use in tough industrial environments. Experience and detailed testing are therefore required for checking whether the components meet the stringent requirements in terms of temperature resistance, resistance to vibration, and electromagnetic compatibility. Prior to delivery, all Industrial PCs are subjected to comprehensive quality control procedures in order to verify that they are fit for the purpose. Beckhoff Industrial PCs satisfy the Machine Guidelines and carry the CE mark: all PC components are checked for electromagnetic compatibility (EMC) and comply with the relevant standards.

Robust industrial design PCs with highest performance components

Beckhoff Industrial PCs satisfy industry's demands:

- the right Industrial PC for every controller
- highest performance PCs with Intel[®] Atom[™] up to Intel[®] Xeon[®] processors
- open standards following the norm ATX
- components carefully tested to ensure appropriateness for industrial applications
- appealing industrial design housings
- CPX for use in hazardous areas, Zone 2/22
- easy access to PC components
- Individual housing construction allows optimum adaptation to controller requirements.
- integration of electromechanical buttons, switches, scanners, handwheels and other components in the Control Panel
- designed for machine-oriented use
- long-term availability of components

Industrial PC

Panel PCs

www.beckhoff.com/Panel-PC



C36xx | ATX built-in Panel PC, Intel[®] Celeron[®], Pentium[®] or Core[™] display sizes: 12- or 15-inch



CP32xx | Multi-touch Panel PC with mounting arm, Intel[®] Celeron[®] or Core™

- display sizes: 12-, 15-, 15.6-, _ 18.5-, 19-, 21.5- or 24-inch
- IP 65 protection



CP22xx | Multi-touch built-in Panel PC, Intel[®] Celeron[®] or Core[™] display sizes: 12-, 15-, 15.6-, 18.5-, 19-, 21.5- or 24-inch

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Intel[®] Celeron[®], Pentium[®] or Core[™] display sizes: 12-, 15- or 19-inch

Intel[®] Celeron[®] or Core™

display sizes: 12-, 15- or 19-inch IP 65 protection _

Intel[®] Celeron[®] or Core™ display sizes: 12-, 15- or 19-inch

See page 58

See page 74

See page 52



CP37xx | Multi-touch Panel PC with mounting arm, Intel[®] Atom™

- display sizes: 12-, 12.1-, 15-,
 15.6-, 18.5-, 19-, 21.5- or 24-inch
- IP 65 protection
- display sizes CPX37xx: 15-, 19- or 21.5-inch

See page 48



CP27xx | Multi-touch built-in Panel PC, Intel[®] Celeron[®] ULV or Atom[™]

- display sizes: 12-, 12.1-, 15-,
 15.6-, 18.5-, 19-, 21.5- or 24-inch
- display sizes CPX27xx:
 15-, 19- or 21.5-inch



CP26xx | **Built-in Panel PC, ARM Cortex™-A8** - display sizes: 7-, 12-, 12.1-, 15-, 15.6-, 18.5-, 19-, 21.5or 24-inch

See page 36

See page 40



CP77xx | Panel PC with mounting arm, Intel[®] Celeron[®] ULV

- display sizes: 12-, 15- or 19-inch
- IP 65 protection



CP67xx | Built-in Panel PC, Intel® Celeron® ULV or Atom™

- display sizes: 5.7-, 12-, 15- or 19-inch
 display sizes CP6706: 7-inch;
- CP6700: 10.1-inch



CP66xx | Built-in Panel PC, ARM Cortex™-A8

- display sizes: 5.7-, 6.5-, 12-, 15- or 19-inch
- display sizes CP6606: 7-inch; CP6600: 10.1-inch

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CP22xx | Multi-touch built-in Panel PC

www.beckhoff.com/CP22xx

The CP22xx built-in Panel PC series is characterised by a modern operating concept with multi-touch display as well as an advanced, elegant device design. It is designed for installation in the front of a control cabinet. The CP22xx combine reliable Beckhoff Control Panel design with state-of-the-art Industrial PC technology. The right display size is available for every application — in landscape or portrait orientation (horizontal/vertical). With their highly integrated 3½-inch motherboards, the CP22xx built-in Industrial PCs represent a high-performance platform for machine construction and plant engineering applications that can be used in conjunction with TwinCAT automation software under Windows 10 IoT Enterprise.

CP22xx Panel PCs are equipped with Intel[®] Celeron[®] or Intel[®] Core[™] i3/i5/i7 processors and have one or two hard disks, SSDs or CFast cards or combinations thereof. With the





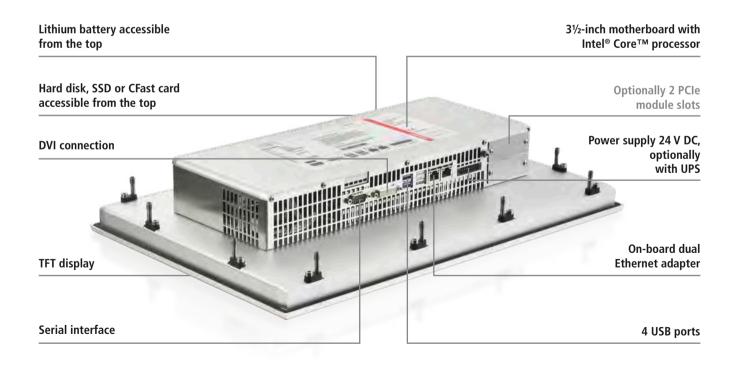
Display sizes



on-board RAID controller, two same hard disks, SSDs or CFast cards can be mirrored.

CP22xx are supplied with a 24 V power supply unit, optionally also with an integrated uninterruptible power supply (UPS). A battery pack can be connected externally and installed on a DIN rail close to the PC. Data media, the fan and the lithium battery of the system clock are accessible from the rear under the fan cover.

Due to its two independent Ethernet interfaces the CP22xx is ideally suited as a compact central processing unit for an EtherCAT control system. Two free slots for PCIe modules can be optionally integrated in the PC housing, offering the possibility to extend the PC, e.g. with additional Ethernet interfaces, USB ports or PROFIBUS. NOVRAM for failsafe data storage can also be plugged as PCIe module.





CP22xx | Panel PC with Intel[®] Core[™] i processor The high-performance multi-touch built-in Panel PC



Ordering information	Multi-finger touch screen
12-inch display 800 x 600	CP2212
15-inch display 1024 x 768	CP2215
15.6-inch display 1366 x 768	CP2216
18.5-inch display 1366 x 768	CP2218
19-inch display 1280 x 1024	CP2219
21.5-inch display 1920 x 1080	CP2221
24-inch display 1920 x 1080	CP2224



Rear view of CP22xx-0010 for all landscape orientations from 15.6-inch

CP22xx	CP22xx-0010, -0020
Housing	aluminium housing with glass front
	all connectors at the bottom of the rear side
	PC to be opened from the back side
	all components easily accessible
	1 slot for one 2½-inch hard disk or SSD and 1 slot for one CFast card, accessible from outside
	2 connector brackets to lead out interfaces of the motherboard at the connection section
	fan cartridge at the PC top side, accessible from outside
	pull-out clamping levers for fast installation without loose parts
	protection class front side IP 65, rear side IP 20
	operating temperature 055 °C

Features	CP22xx-0010	CP22xx-0020	
Display	12-, 15-, 15.6-, 18.5-, 19-, 21.5- or 24-inch display	12-, 15-, 15.6-, 18.5-, 19-, 21.5- or 24-inch display	
Processor	Intel [®] Celeron [®] , Core™ i3/i5/i7 4 th Generation	Intel [®] Celeron [®] , Pentium [®] , Core [™] i3/i5/i7 6 th /7 th Generation	
Motherboard	3½-inch	3½-inch	
Slots	1 Mini PCI slot, optionally 2 PCIe modules	-	
Free slots	1 Mini PCI slot, optionally 2 PCIe modules	-	
Max. card length	Mini PCI	-	
Memory	216 GB DDR3L RAM	432 GB DDR4 RAM	
Graphic adapter	integrated in the processor	integrated in the processor	
Ethernet	2 on-board	2 on-board	
Hard disks/flash	1 or 2 x 2 ¹ / ₂ -inch HDD, SSD or CFast	1 or 2 x 2½-inch HDD, SSD or CFast	
RAID 1	2 x 2 ¹ / ₂ -inch HDD, SSD or CFast	2 x 2 ¹ / ₂ -inch HDD, SSD or CFast	
Power supply	24 V DC	24 V DC	
Recommendation	available	recommended for new projects	
Further information	for further options, technical drawings, documentations, etc. see www.beckhoff.com/CP22xx		

CP26xx | Dual-touch built-in Panel PC

www.beckhoff.com/CP26xx

The CP26xx built-in Panel PC series is characterised by a modern operating concept with dual-touch display as well as an advanced, elegant device design. It is designed for installation in the front of a control cabinet. The CP26xx combine reliable Beckhoff Control Panel design with state-of-the-art Industrial PC technology. The right display size from 7 to 24 inches is available for every application – in landscape or portrait orientation (horizontal/vertical). With their highly integrated 3¹/₂-inch motherboards, the CP26xx built-in Industrial PCs represent a high-performance platform for machine construction and plant engineering applications that can be used in conjunction with TwinCAT automation software under Windows Embedded Compact 7.



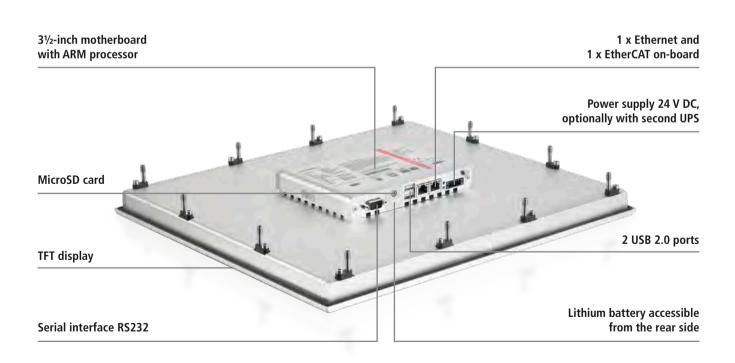
Display sizes



CP26xx Panel PCs are equipped with an ARM Cortex[™]-A8 processor. They are equipped with a microSD card and have no rotating parts.

CP26xx are supplied with a 24 V power supply unit, optionally also with a capacitive uninterruptible power supply (second UPS). The microSD card and the lithium battery of the system clock are accessible from the rear in the connector bracket.

Due to its independent Ethernet and EtherCAT interfaces the CP26xx is ideally suited as a compact central processing unit for an EtherCAT control system. NOVRAM for fail-safe data storage is integrated on the motherboard.





CP26xx | **Panel PC with ARM Cortex[™]-A8** The compact dual-touch built-in Panel PC



Ordering information	Dual-finger touch screen
7-inch display 800 x 480	CP2607
12-inch display 800 x 600	CP2612
12.1-inch display 1280 x 800	CP2613
15-inch display 1024 x 768	CP2615
15.6-inch display 1366 x 768	CP2616
18.5-inch display 1366 x 768	CP2618
19-inch display 1280 x 1024	CP2619
21.5-inch display 1920 x 1080	CP2621
24-inch display 1920 x 1080	CP2624



CP26xx-0000
aluminium housing with glass front
all connectors at the bottom of the rear side
PC to be opened from the back side, all components easily accessible
1 slot for a microSD flash card, accessible from outside
protection class front side IP 65, rear side IP 20
operating temperature 055 °C

Features	CP26xx-0000
Display	7-, 12-, 12.1-, 15-, 15.6-, 18.5-, 19-, 21.5- or 24-inch display
Processor	ARM Cortex™-A8, 1 GHz
Motherboard	3½-inch
Slots	-
Memory	1 GB DDR3 RAM
Graphic adapter	integrated in the processor
Ethernet	1 x Ethernet and 1 x EtherCAT on-board
Hard disks/flash	microSD flash card
Power supply	24 V DC
Recommendation	recommended for new projects
Further information	for further options, technical drawings, documentations, etc. see www.beckhoff.com/CP26xx

CP27xx | Fanless multi-touch built-in Panel PC

www.beckhoff.com/CP27xx

The CP27xx built-in Panel PC series is characterised by a modern operating concept with multi-touch display as well as an advanced, elegant device design. It is designed for installation in the front of a control cabinet. The CP27xx combine reliable Beckhoff Control Panel design with state-of-the-art Industrial PC technology. The right display size is available for every application. With their highly integrated 3½-inch motherboards, the CP27xx built-in Industrial PCs represent a high-performance platform for machine construction and plant engineering applications that can be used in conjunction with TwinCAT automation software under Windows 7 Professional, Windows 7 Ultimate, Windows Embedded Standard 7, Windows Embedded Compact 7 or with Intel[®] Atom[™] also under Windows 10 IoT Enterprise.

CP27xx Panel PCs are equipped with Intel[®] Celeron[®] ULV 1.4 GHz or with Intel[®] Atom[™] with up to four cores and have one or two CFast cards. With the on-board RAID controller, two same CFast cards can be mirrored in the CP27xx-0000.

CP27xx are supplied with a 24 V power supply unit, optionally also with

an integrated uninterruptible power supply (UPS). A battery pack can be connected externally and installed on a DIN rail close to the PC.

Data media and the lithium battery of the system clock are accessible from the rear.

Due to its two independent Ethernet interfaces the CP27xx is ideally suited as a compact central processing unit for an EtherCAT control system. A third independent Ethernet interface is available as an option.

An optional PCIe module slot offers the possibility to extend the PC, e.g. with additional Ethernet interfaces.





Display sizes

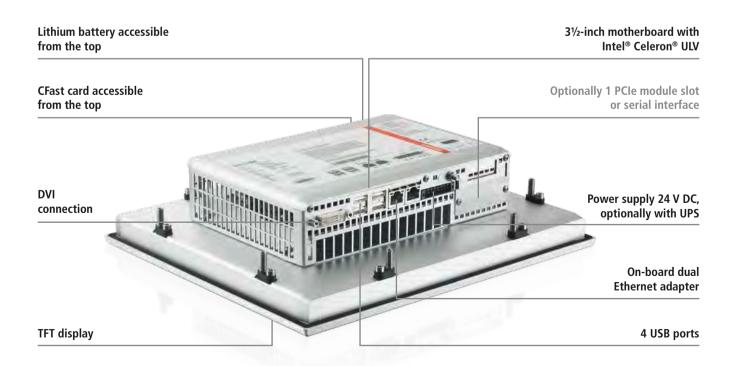


CPX27xx for application in hazardous areas, Zone 2/22

With the CPX Panel PC series, the proven multi-touch technology of Beckhoff Panel PCs is available in particularly robust versions, complying with the requirements for use in hazardous areas classified Zone 2/22. The high level of functionality and excellent build quality ensure the reliability of CPX panels even under harsh environmental conditions. The capacitive touch technology provides the typical convenient operation of all Beckhoff multi-touch panels. The aesthetically pleasing appearance of the panel and the look and feel of the aluminium housing are maintained, making them visual highlights in explosion-proof environments. The devices are available with three different displays in the sizes 15, 19 and 21.5 inches.

The CPX27xx features an Intel[®] Atom[™] processor with up to four cores, one CFast card and no rotating parts. The CPX27xx comes with a 24 V power supply unit. The CFast card is accessible from the rear in the plug connector panel. Optionally, a third Ethernet interface and a 2½-inch hard disk/SSD can be integrated instead of the CFast card.







CP27xx | Fanless multi-touch built-in Panel PC

Ordering information	Multi-finger touch screen	
12-inch display 800 x 600	CP2712	
12.1-inch display 1280 x 800	CP2713	
15-inch display 1024 x 768	CP2715	
15.6-inch display 1366 x 768	CP2716	
18.5-inch display 1366 x 768	CP2718	
19-inch display 1280 x 1024	CP2719	
21.5-inch display 1920 x 1080	CP2721	
24-inch display 1920 x 1080	CP2724	
CP27xx	CP27xx-0000, -0010	
Housing	aluminium housing with glass front	
	all connectors at the bottom of the rear side	
	PC to be opened from the back side	
	all components easily accessible	
	2 slots for CFast cards, accessible from outside	
	1 connector bracket to lead out interfaces of the motherboar	rd at the connection section
	pull-out clamping levers for fast installation without loose p	arts
	protection class front side IP 65, rear side IP 20	
	operating temperature 055 °C	
Features	CP27xx-0000	CP27xx-0010
Display	12-, 12.1-, 15-, 15.6-, 18.5-, 19-, 21.5- or 24-inch display	12-, 12.1-, 15-, 15.6-, 18.5-, 19-, 21.5- or 24-inch display
Processor	Intel® Celeron® ULV	Intel [®] Atom [™]
Motherboard	3½-inch	3½-inch
Slots	optionally 1 PCIe module	optionally 1 PCIe module
Memory	28 GB DDR3 RAM	28 GB DDR3L RAM
Graphic adapter	integrated in the processor	integrated in the processor
Ethernet	2 on-board	2 on-board
Hard disks/flash	1 or 2 x CFast	1 or 2 x CFast
RAID 1	2 x CFast	-
Power supply	24 V DC	24 V DC
Recommendation	not recommended for new projects	recommended for new projects
Further information	for further options, technical drawings, documentations, etc.	



CPX27xx | Fanless multi-touch built-in Panel PC For use in hazardous areas, Zone 2/22

Ordering information	Multi-finger touch screen
15-inch display 1024 x 768	CPX2715
19-inch display 1280 x 1024	CPX2719
21.5-inch display 1920 x 1080	CPX2721

CPX27xx	CPX27xx-0010
Housing	aluminium housing with glass front
	for use in hazardous areas, Zone 2/22
	all connectors at the bottom of the rear side
	PC to be opened from the back side
	all components easily accessible
	1 slot for one CFast card, accessible from outside
	pull-out clamping levers for fast installation without loose parts
	solid clamping frame for even pressure distribution on the seal
	protection class front side IP 65, rear side IP 20
	operating temperature 055 °C

Features	CPX27xx-0010
Display	15-, 19- or 21.5-inch TFT display
Processor	Intel [®] Atom™
Motherboard	3½-inch
Memory	28 GB DDR3L RAM
Graphic adapter	integrated in the processor
Ethernet	2 on-board
Hard disks/flash	4 GB CFast card
Power supply	24 V DC
Further information	for further options, technical drawings, documentations, etc. see www.beckhoff.com/CPX27xx

CP32xx | Multi-touch Panel PC

www.beckhoff.com/CP32xx

With the CP32xx series, a high-end Panel PC with multi-touch can be used directly in the field. The devices in a slender aluminium housing feature complete IP 65 protection and are designed for mounting arm installation. The Panel PCs offer maximum computing power with processors of the latest generation, such as Intel[®] Celeron[®] or Core[™] i3/i5/i7.

A choice of seven different multi-touch TFT displays in sizes between 12-inch and 24-inch and 4:3, widescreen, landscape or portrait formats are available. Cooling is achieved by means of cooling fins on the outer wall as well as fans inside the closed housing. The operating temperature range is 0 to 45 °C.

The Panel PC features an integrated rotatable and tiltable mounting arm adapter for a 48 mm diameter mounting arm tube. There is a choice of attaching the mounting arm from above or below. The connecting cables are laid through the mounting arm. The Industrial PC connections (up to six) with IP 65 connectors are positioned in the large wiring space and are easily accessible. The wiring area



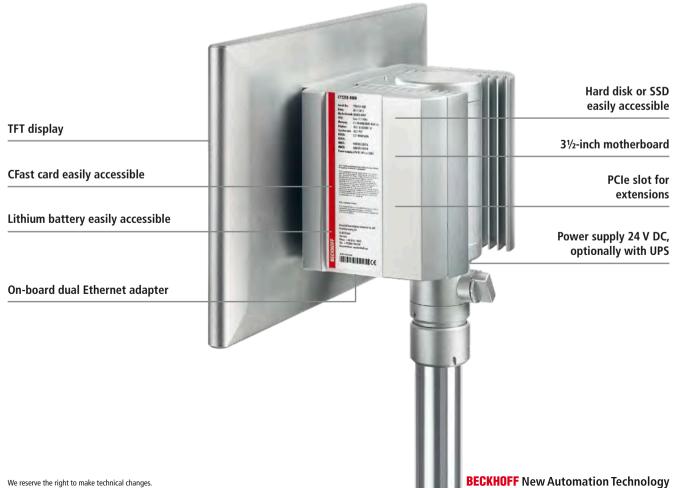
Display sizes



can be opened easily without dismounting the device from the mounting arm, offering fast access to the IP 65 connectors for power supply, Ethernet and optional fieldbus or USB. Prefabricated cables in various lengths are available for all connections. The C32xx series Panel PCs are supplied with a 24 V power supply unit, optionally with integrated uninterruptible power supply (UPS). A battery pack can be connected externally and installed on a DIN rail in the control cabinet.

The CP32xx Panel PCs are equipped with one or two hard disks, SSDs or CFast cards or combinations thereof. With the on-board RAID controller, two same hard disks, SSDs or CFast cards can be mirrored. The data media and the lithium battery of the system clock are accessible from the rear under the cover.

There is a PCI slot in the CP32xx. A factoryfitted FC9062 PCIe module with two additional Ethernet ports can be added. NOVRAM is also available as PCIe module for fail-safe data storage.





CP32xx | **Multi-touch Panel PC** The high-performance multi-touch Panel PC



Ordering information Multi-finger touch screen 12-inch display 800 x 600 CP3212 15-inch display 1024 x 768 CP3215 15.6-inch display 1366 x 768 CP3216 18.5-inch display 1366 x 768 CP3218 19-inch display 1280 x 1024 CP3219 21.5-inch display 1920 x 1080 CP3221 24-inch display 1920 x 1080 CP3224



CP32xx	CP32xx-0010, -0020
Housing	Industrial PC with Control Panel for mounting arm installation
	rotatable and tiltable mounting arm adapter for Rittal and Rolec mounting arm systems with 48 mm tube from top
	wiring area for up to 6 IP 65 connectors
	1 slot for a 21/2-inch hard disk or SDD and 1 slot for CFast
	lithium battery of the system clock changeable from outside
	passive cooling through heat sink structure, internal fans for equal heat distribution to all the walls of the housing
	20 cm free space required around the PC for air circulation
	protection class IP 65
	operating temperature 045 °C

Features	CP32xx-0010	CP32xx-0020
Display	12-, 15-, 15.6-, 18.5-, 19-, 21.5- or 24-inch display	12-, 15-, 15.6-, 18.5-, 19-, 21.5- or 24-inch display
Processor	Intel [®] Celeron [®] , Core [™] i3/i5/i7 4 th Generation	Intel [®] Celeron [®] , Pentium [®] , Core [™] i3/i5/i7 6 th /7 th Generation
Motherboard	3½-inch	3½-inch
Slots	1 Mini PCI slot	-
Free slots	1 Mini PCI slot	-
Max. card length	Mini PCI	-
Memory	216 GB DDR3L RAM	432 GB DDR4 RAM
Graphic adapter	integrated in the processor	integrated in the processor
Ethernet	2 on-board, one of these is led out in the wiring area	2 on-board, one of these is led out in the wiring area
Hard disks/flash	1 or 2 x 2 ¹ / ₂ -inch HDD or SSD, 1 x 2 ¹ / ₂ -inch HDD or SSD	1 or 2 x 2 ¹ / ₂ -inch HDD or SSD, 1 x 2 ¹ / ₂ -inch HDD or SSD
	and 1 x CFast or 2 x CFast	and 1 x CFast or 2 x CFast
RAID 1	2 x 2½-inch HDD, SSD or CFast	2 x 2½-inch HDD, SSD or CFast
Power supply	24 V DC	24 V DC
Recommendation	available	recommended for new projects
Further information	for further options, technical drawings, documentations, etc.	see www.beckhoff.com/CP32xx

CP37xx | Multi-touch Panel PC

www.beckhoff.com/CP37xx

With the CP37xx series, a Panel PC with multi-touch can be used directly in the field. The devices in a robust aluminium housing feature complete IP 65 protection and are designed for mounting arm installation. The Panel PCs offer high computing power with Intel[®] Atom[™] processors with up to four cores.

A choice of seven different multi-touch TFT displays in sizes between 12-inch and 24-inch in 4:3, 5:4 or widescreen formats are available. Cooling is achieved by means of cooling fins on the outer wall as well as fans inside the closed housing. The operating temperature range is 0 to 45 °C.

The Panel PC features an integrated rotatable and tiltable mounting arm adapter for a 48 mm diameter mounting arm tube. There is a choice of attaching the mounting arm from above or below. The connecting cables are laid through the mounting arm. The Industrial PC connections (up to four) with IP 65 connectors are positioned in the large wiring space and are easily accessible. The wiring area can be opened easily without dismounting the device from the mounting arm, offering fast access to the IP 65 connectors for power supply, Ethernet and optional USB or RS232. Prefabricated cables in various lengths are available for all connections. The C37xx series Panel PCs are supplied with a 24 V power supply unit, optionally with integrated uninterruptible power supply (UPS). A battery pack can be connected externally and installed on a DIN rail in the control cabinet.

The CP37xx Panel PCs are equipped with one or two CFast cards. The data media and the lithium battery of the system clock are accessible from the rear under the cover.



Display sizes



CPX37xx for application in hazardous areas, Zone 2/22

With the CPX Panel PC series, the proven multi-touch technology of Beckhoff Panel PCs is available in particularly robust versions, complying with the requirements for use in hazardous areas classified Zone 2/22. The high level of functionality and excellent build quality ensure the reliability of CPX panels even under harsh environmental conditions. The capacitive touch technology provides the typical convenient operation of all Beckhoff multi-touch panels. The aesthetically pleasing appearance of the panel and the look and feel of the aluminium housing are maintained, making them visual highlights in explosion-proof environments. The devices are available with three different displays in the sizes 15, 19 and 21.5 inches.

The CPX37xx features an Intel[®] Atom[™] processor with up to four cores, one CFast card and no rotating parts. The CPX37xx comes with a 24 V power supply unit. The CFast card is accessible from the side. Optionally, a 2½-inch hard disk/SSD can be integrated instead of the CFast card. The device is mounted via 4 x M6 threaded holes at the rear.



CPX37xx





CP37xx | Multi-touch Panel PC

Intel[®] Atom[™] with up to four cores

Ordering information	Multi-finger touch screen
12-inch display 800 x 600	CP3712
12.1-inch display 1280 x 800	CP3713
15-inch display 1024 x 768	CP3715
15.6-inch display 1366 x 768	CP3716
18.5-inch display 1366 x 768	CP3718
19-inch display 1280 x 1024	CP3719
21.5-inch display 1920 x 1080	CP3721
24-inch display 1920 x 1080	CP3724

CP37xx	CP37xx-0010
Housing	Industrial PC with Control Panel for mounting arm installation
	rotatable and tiltable mounting arm adapter for Rittal and Rolec mounting arm systems with 48 mm tube from top
	wiring area for up to 4 IP 65 connectors
	2 slots for CFast cards
	CFast cards and lithium battery of the system clock, changeable from outside
	passive cooling through heat sink; internal fan for equal heat distribution to all the walls of the housing
	20 cm free space required around the PC for air circulation
	protection class IP 65
	operating temperature 045 °C

Features	CP37xx-0010
Display	12-, 12.1-, 15-, 15.6-, 18.5-, 19-, 21.5- or 24-inch display
Processor	Intel [®] Atom™
Motherboard	3½-inch
Slots	optionally 1 PCIe module
Memory	28 GB DDR3L RAM
Graphic adapter	integrated in the processor
Ethernet	2 on-board, one of these is led out in the wiring area
Hard disks/flash	1 or 2 x CFast
Power supply	24 V DC
Recommendation	recommended for new projects
Further information	for further options, technical drawings, documentations, etc. see www.beckhoff.com/CP37xx



CPX37xx | **Multi-touch Panel PC** For use in hazardous areas, Zone 2/22

Ordering information	Multi-finger touch screen
15-inch display 1024 x 768	CPX3715
19-inch display 1280 x 1024	CPX3719
21.5-inch display 1920 x 1080	CPX3721

CPX37xx	CPX37xx-0010
Housing	Industrial PC with Control Panel for mounting arm installation
	for use in hazardous areas, Zone 2/22
	For mounting four M6 threaded holes are provided at a distance of 100 x 100 mm in the connection block on the
	rear panel. The connectors for connecting the Control Panel are plugged into the connection block from the rear.
	1 slot for one CFast card
	CFast card and lithium battery of the system clock, changeable from outside
	passive cooling
	protection class IP 65
	operating temperature 045 °C

Features	CPX37xx-0010
Display	15-, 19- or 21.5-inch TFT display
Processor	Intel [®] Atom™
Motherboard	3½-inch
Memory	28 GB DDR3L RAM
Graphic adapter	integrated in the processor
Ethernet	2 on-board, one of these is led out in the wiring area
Hard disks/flash	4 GB CFast card
Power supply	24 V DC
Further information	for further options, technical drawings, documentations, etc. see www.beckhoff.com/CPX37xx

CP62xx | "Economy" built-in Panel PC

www.beckhoff.com/CP62xx

The CP62xx built-in Panel PC-series is designed for installation in the front of a control cabinet. The CP62xx series combines the Beckhoff Control Panel design with stateof-the-art Industrial PC technology. The right display size and keyboard are available for every application. With their highly integrated 3½-inch motherboards, the CP62xx built-in Industrial PCs represent a high-performance platform for machine construction and plant engineering applications that can be used in conjunction with TwinCAT automation software under Windows 10 IoT Enterprise.

The CP62xx Panel PCs are available with a choice of Intel[®] processors. The CP62xx Panel PCs can be equipped with a CFast card and a 2½-inch hard disk or SSD. A fan cartridge with speed-controlled fans supported by dual ball bearing is integrated in the rear panel. In front of the fan cartridge a 2 cm space is required for ventilation. In each configuration the Panel PCs of this series are approved for ambient temperatures between 0 and 55 °C.

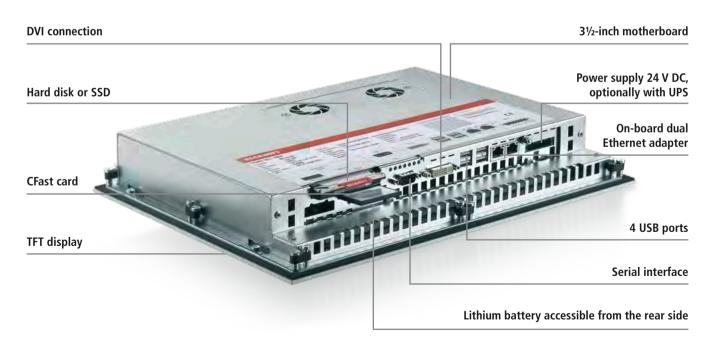


Front laminates



The CP62xx are supplied with a 24 V power supply unit, optionally also with an integrated uninterruptible power supply (UPS). A battery pack can be connected externally and installed on a DIN rail close to the PC. Due to its two independent Ethernet interfaces the CP62xx is ideally suited as a compact central processing unit for an EtherCAT control system. Two free slots for PCIe modules can be optionally integrated into the PC housing, offering the possibility to extend the PC, e.g. with additional Ethernet interfaces, USB ports or PROFIBUS. NOVRAM for failsave data storage can also be plugged as PCIe module.

The CP62xx can optionally be extended with PCIe module or plug-in card slots.



Optionally 2 PCI or PCIe plug-in card slots, optionally 2 PCIe module slots



CP62xx | **"Economy" built-in Panel PC** The slimline built-in Industrial PC with 3¹/₂-inch motherboard

Ordering information	without touch screen	with single-touch screen	with touch pad
Display only			
12-inch display 800 x 600	CP6201-0000-00xx	CP6201-0001-00xx	
15-inch display 1024 x 768	CP6202-0000-00xx	CP6202-0001-00xx	
19-inch display 1280 x 1024	CP6203-0000-00xx	CP6203-0001-00xx	
Display only, USB A socket in the	e front		
12-inch display 800 x 600	CP6201-0020-00xx	CP6201-0021-00xx	
15-inch display 1024 x 768	CP6202-0020-00xx	CP6202-0021-00xx	
19-inch display 1280 x 1024	CP6203-0020-00xx	CP6203-0021-00xx	
With function keys			
12-inch display 800 x 600	CP6211-0000-00xx	CP6211-0001-00xx	
15-inch display 1024 x 768	CP6212-0000-00xx	CP6212-0001-00xx	
19-inch display 1280 x 1024	CP6213-0000-00xx	CP6213-0001-00xx	
Numeric keyboard			
12-inch display 800 x 600	CP6221-0000-00xx	CP6221-0001-00xx	CP6221-0002-00xx
15-inch display 1024 x 768	CP6222-0000-00xx	CP6222-0001-00xx	CP6222-0002-00xx
19-inch display 1280 x 1024	CP6223-0000-00xx	CP6223-0001-00xx	CP6223-0002-00xx
Alphanumeric keyboard			
12-inch display 800 x 600	CP6231-0000-00xx	CP6231-0001-00xx	CP6231-0002-00xx
15-inch display 1024 x 768	CP6232-0000-00xx	CP6232-0001-00xx	CP6232-0002-00xx
19-inch display 1280 x 1024	CP6233-0000-00xx	CP6233-0001-00xx	CP6233-0002-00xx
Alphanumeric keyboard with PLC keys on the sides			
15-inch display 1024 x 768	CP6242-0000-00xx	CP6242-0001-00xx	









Alphanumeric keyboard



Alphanumeric keyboard with PLC keys on the sides

Without keys

Function keys

Numeric keyboard

 CP62xx
 CP62xx-xxxx-0060, -0070

 Housing
 aluminium front with steel sheet rear cover

 drives easily accessible
 all connectors at the bottom of the rear side

 all connectors at the bottom of the rear side
 1 slot for 2½-inch hard disk and 1 slot for a CFast card accessible from the rear side

 fan cartridge at the rear side, accessible from outside
 lithium battery of the system clock accessible from the rear side

 pull-out clamping levers for fast installation without loose parts
 protection class front side IP 65, rear side IP 20

 operating temperature 0...55 °C
 operating temperature 0...55 °C

Features	CP62xx-xxxx-0060	CP62xx-xxxx-0070
Display	12-, 15- or 19-inch TFT display	12-, 15- or 19-inch TFT display
Processor	Intel [®] Celeron [®] , Core™ i3/i5/i7 4 th Generation	Intel [®] Celeron [®] , Pentium [®] , Core [™] i3/i5/i7 6 th /7 th Generation
Motherboard	3½-inch	3½-inch
Slots	1 Mini PCI, optionally 2 PCIe modules	-
	or 2 PCI/PCIe plug-in card slots	
Free slots	1 Mini PCI and optionally 2 PCIe modules	_
	or 2 PCI/PCIe plug-in card slots	
Max. card length	Mini PCI, optionally 2 PCIe modules	-
	or 2 x 190 mm plug-in cards	
Memory	216 GB DDR3L RAM	432 GB DDR4 RAM
Graphic adapter	integrated in the processor	integrated in the processor
Ethernet	2 on-board	2 on-board
Hard disks/flash	2 ¹ / ₂ -inch HDD or SSD and/or 1 x CFast or 2 x CFast	2 ¹ / ₂ -inch HDD or SSD and/or 1 x CFast or 2 x CFast
RAID 1	2 x CFast	2 x CFast
Power supply	24 V DC	24 V DC
Recommendation	available	recommended for new projects
Further information	for further options, technical drawings, documentations, etc. see www.beckhoff.com/CP62xx	



Extension for PCIe modules

The Panel PCs CP62xx can be expanded by two additional PCIe module slots. The rear cover is constructed 30 mm deeper for PCIe modules (see above). The module slots can accept Beckhoff PCIe modules, for example, the FC9062 dual gigabit Ethernet module.



PCIe module FC9062, dual gigabit Ethernet

Ordering information	Options for CP62xx	
С9900-В500	2 PCIe module slots integrated inside CP62xx, to plug-in Beckhoff PCIe modules or to lead out interfaces	
	of the motherboard ex factory. The depth of the back cover is increased by 30 mm (1.2").	



Extension for PCI and PCIe plug-in cards

The Panel PCs CP62xx can be expanded by two slots for standard PC plug-in cards. They can accept conventional PC plug-in cards up to 190 mm in length. The 66 mm deeper hood at the rear (see above) covers a backplane that provides a choice of two PCI slots, two PCI Express slots or one PCI and one PCI Express slot. Card holders ensure the secure fixation of large cards.

Ordering information	Options for CP62xx	
C9900-B504	2 PCIe plug-in card slots on the passive backplane integrated inside CP62xx, to plug-in PCIe x1 cards	
	up to 190 mm length. The depth of the back cover is increased by 66 mm (2.6").	
C9900-B508	2 PCI plug-in card slots on the passive backplane integrated inside CP62xx, to plug-in PCI cards	
	up to 190 mm length. The depth of the back cover is increased by 66 mm (2.6").	
C9900-B512	1 PCI and 1 PCIe plug-in card slot on a passive backplane integrated inside CP62xx, to plug-in one PCI	
	and one PCIe x1 card up to 190 mm (6.3") length. The depth of the back cover is increased by 66 mm (2.6").	

CP65xx | Built-in Panel PC

www.beckhoff.com/CP65xx

The Panel PC series CP65xx is designed for installation in the front of a control cabinet. A built-in Control Panel with DVI and USB interface is the front of the Panel PC. The correct display size and keyboard are thus available for every application. The CP65xx built-in Industrial PCs represent a powerful platform for machine construction and plant engineering applications, for example with the TwinCAT automation software under Windows 10 IoT Enterprise.

The 7-slot ATX Panel PCs CP65xx can be equipped with 12-, 15- or 19-inch TFT display, as a monitor without keys or with different





Front laminates











Without keys

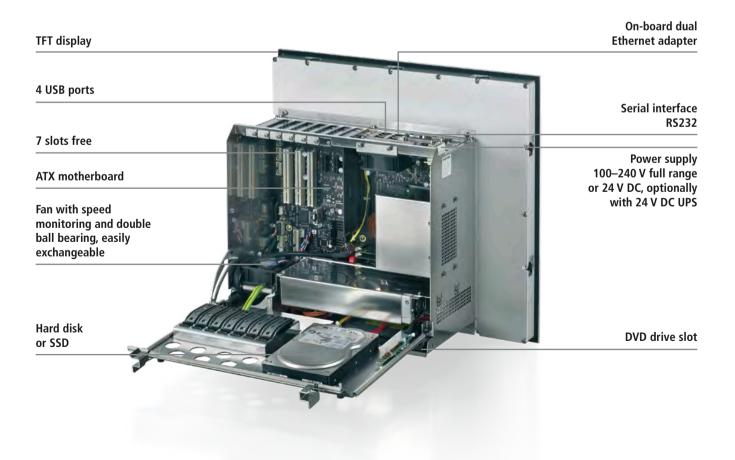
Function keys

Numeric keyboard

Alphanumeric keyboard

With PLC keys on the sides

types of keyboards. A touch screen or touch pad is optionally available. A large number of push-button extensions are also available. The CP65xx are equipped with Intel[®] Celeron[®], Pentium[®] or Core[™] i3/i5/i7 processors on an ATX motherboard and have PCI and PCI Express slots. A multi DVD drive can be installed. A 100 to 240 AC full range power supply or a 24 V DC power supply is used in the PC. The Control Panel is connected to the PC via DVI and USB. The PC deals with the power supply for the Control Panel. The cables are installed in the PC housing.





CP65xx | **Built-in Panel PC** The universal built-in Industrial PC with ATX motherboard

Ordering information	without touch screen	with single-touch screen	with touch pad
Display only			
12-inch display 800 x 600	CP6501-0000-00xx	CP6501-0001-00xx	
15-inch display 1024 x 768	CP6502-0000-00xx	CP6502-0001-00xx	
19-inch display 1280 x 1024	CP6503-0000-00xx	CP6503-0001-00xx	
Display only, USB A socket in the	e front		
12-inch display 800 x 600	CP6501-0020-00xx	CP6501-0021-00xx	
15-inch display 1024 x 768	CP6502-0020-00xx	CP6502-0021-00xx	
19-inch display 1280 x 1024	CP6503-0020-00xx	CP6503-0021-00xx	
With function keys			
12-inch display 800 x 600	CP6511-0000-00xx	CP6511-0001-00xx	
15-inch display 1024 x 768	CP6512-0000-00xx	CP6512-0001-00xx	
19-inch display 1280 x 1024	CP6513-0000-00xx	CP6513-0001-00xx	
Numeric keyboard			
12-inch display 800 x 600	CP6521-0000-00xx	CP6521-0001-00xx	CP6521-0002-00xx
15-inch display 1024 x 768	CP6522-0000-00xx	CP6522-0001-00xx	CP6522-0002-00xx
19-inch display 1280 x 1024	CP6523-0000-00xx	CP6523-0001-00xx	CP6523-0002-00xx
Alphanumeric keyboard			
12-inch display 800 x 600	CP6531-0000-00xx	CP6531-0001-00xx	CP6531-0002-00xx
15-inch display 1024 x 768	CP6532-0000-00xx	CP6532-0001-00xx	CP6532-0002-00xx
19-inch display 1280 x 1024	CP6533-0000-00xx	CP6533-0001-00xx	CP6533-0002-00xx
Alphanumeric keyboard with PLC keys on the sides			
15-inch display 1024 x 768	CP6542-0000-00xx	CP6542-0001-00xx	









Alphanumeric keyboard



Alphanumeric keyboard with PLC keys on the sides

Without keys

Function keys

Numeric keyboard

 CP65xx
 CP65xx-xxxx-0080, -0090

 Housing
 7-slot ATX housing

 all slots for plug-in cards with a length of up to 190 mm
 drives and plug-in cards easily accessible

 all connectors on the top
 detailed PC configuration information on the housing

 card holders, actuated without tools
 status LEDs and protected reset key

 pull-out clamping levers for fast installation without loose parts
 protection class front side IP 65, rear side IP 20

 operating temperature 0...55 °C
 operating temperature 0...55 °C

Features	СР65хх-хххх-0080	СР65хх-хххх-0090
Display	12-, 15- or 19-inch TFT display	12-, 15- or 19-inch TFT display
Processor	Intel [®] Celeron [®] , Core™ i3/i5/i7 4 th Generation	Intel [®] Celeron [®] , Pentium [®] , Core™ i3/i5/i7 6 th /7 th Generation
Motherboard	ATX	ATX
Slots	7	7
Free slots	3 PCI, 2 PCIe x1, 1 PCIe x4 and 1 PCIe x16	2 PCI, 2 PCIe x1, 2 PCIe x4 and 1 PCIe x16
Max. card length	7 x 190 mm	7 x 190 mm
Memory	232 GB DDR3L RAM	464 GB DDR4 RAM
Graphic adapter	integrated in the processor	integrated in the processor
Ethernet	2 on-board	2 on-board
Hard disks/flash	1 x 3 ¹ / ₂ -inch HDD or 2 ¹ / ₂ -inch SSD	1 x 3½-inch HDD or 2½-inch SSD
Possible disk drives	multi DVD	multi DVD
Power supply	100240 V AC or 24 V DC	100240 V AC or 24 V DC
Recommendation	available	available
Further information	for further options, technical drawings, documentations, etc. see www.beckhoff.com/CP65xx	

CP66xx | Built-in Panel PC

www.beckhoff.com/CP66xx

The built-in Panel PCs of the CP66xx series have a wide range of uses including remote desktop display or CP-Link 3 client. They are available in five display sizes: 5.7, 6.5, 12, 15 or 19 inches. CP66xx Panel PCs are equipped with an ARM Cortex[™]-A8 processor. They are equipped with a microSD card and have no rotating parts.

CP66xx are supplied with a 24 V power supply unit, optionally also with a capacitive uninterruptible power supply (second UPS).



Front laminates



Without keys



Function keys



Numeric keyboard



Alphanumeric keyboard

The microSD card and the lithium battery of the system clock are accessible from the rear in the connector bracket.

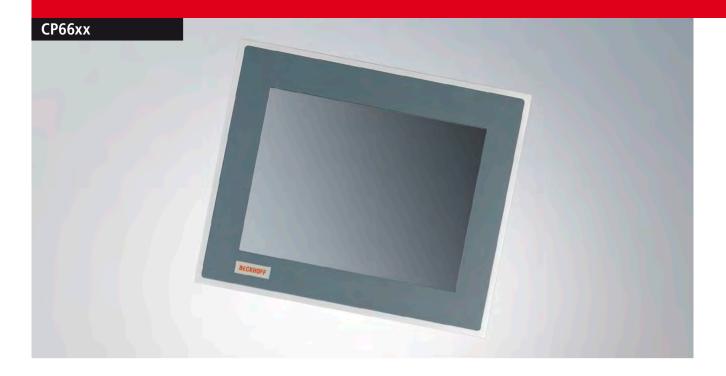
These devices are ideally suited as small controllers for machine construction and

plant engineering applications in conjunction with TwinCAT automation software under Windows Embedded Compact 7.

Due to its independent Ethernet and EtherCAT interfaces the CP66xx is ideally

suited as a compact central processing unit for an EtherCAT control system. NOVRAM for fail-safe data storage is integrated on the motherboard.





CP66xx | Panel PC with ARM Cortex[™]-A8 The "Economy" built-in Panel PC

Ordering information	without touch screen	with single-touch screen	with touch pad
Display only			
5.7-inch display 640 x 480	CP6607-0000-0020	CP6607-0001-0020	
6.5-inch display 640 x 480	CP6609-0000-0020	CP6609-0001-0020	
12-inch display 800 x 600	CP6601-0000-0020	CP6601-0001-0020	
15-inch display 1024 x 768	CP6602-0000-0020	CP6602-0001-0020	
19-inch display 1280 x 1024	CP6603-0000-0020	CP6603-0001-0020	
Display only, USB A socket in the	e front		
12-inch display 800 x 600	CP6601-0020-0020	CP6601-0021-0020	
15-inch display 1024 x 768	CP6602-0020-0020	CP6602-0021-0020	
19-inch display 1280 x 1024	CP6603-0020-0020	CP6603-0021-0020	
With function keys			
6.5-inch display 640 x 480	CP6619-0000-0020	CP6619-0001-0020	
12-inch display 800 x 600	CP6611-0000-0020	CP6611-0001-0020	
15-inch display 1024 x 768	CP6612-0000-0020	CP6612-0001-0020	
19-inch display 1280 x 1024	CP6613-0000-0020	CP6613-0001-0020	
Numeric keyboard			
6.5-inch display 640 x 480	CP6629-0000-0020	CP6629-0001-0020	
12-inch display 800 x 600	CP6621-0000-0020	CP6621-0001-0020	CP6621-0002-0020
15-inch display 1024 x 768	CP6622-0000-0020	CP6622-0001-0020	CP6622-0002-0020
19-inch display 1280 x 1024	CP6623-0000-0020	CP6623-0001-0020	CP6623-0002-0020
Alphanumeric keyboard			
12-inch display 800 x 600	CP6631-0000-0020	CP6631-0001-0020	CP6631-0002-0020
15-inch display 1024 x 768	CP6632-0000-0020	CP6632-0001-0020	CP6632-0002-0020
19-inch display 1280 x 1024	CP6633-0000-0020	CP6633-0001-0020	CP6633-0002-0020





Function keys



Numeric keyboard



Alphanumeric keyboard

CP66xx	CP66xx-xxxx-0020
Housing	aluminium front with steel sheet rear cover
	all connectors at the bottom of the rear side
	1 slot for microSD flash card, accessible from the rear side
	lithium battery of the system clock, accessible from the rear side
	pull-out clamping levers for fast installation without loose parts
	protection class front side IP 65, rear side IP 20
	operating temperature 055 °C

Features	СР66хх-хххх-0020
Display	5.7-, 6.5-, 12-, 15- or 19-inch TFT display
Processor	ARM Cortex™-A8, 1 GHz
Motherboard	3½-inch
Slots	-
Free slots	-
Max. card length	-
Memory	1 GB DDR3 RAM
Graphic adapter	integrated in the processor
Ethernet	1 x Ethernet and 1 x EtherCAT on-board
Hard disks/flash	microSD flash card
Power supply	24 V DC
Recommendation	recommended for new projects
Further information	for further options, technical drawings, documentations, etc. see www.beckhoff.com/CP66xx

CP6606, CP6600 | "Economy" built-in Panel PC

www.beckhoff.com/CP6606

www.beckhoff.com/CP6600

With its highly integrated 3½-inch motherboard, the CP6606 and CP6600 built-in Panel PCs are ideally suited for use in mechanical engineering, for example with TwinCAT automation software under Windows Embedded Compact 7 or as a CP-Link 3 client or Ethernet Control Panel. They are designed for installation in the front of a control cabinet and have a 7-inch, respectively 10.1-inch touch screen displays. Equipped with a fanless ARM Cortex[™]-A8 processor and a MicroSD card the CP66xx contain no rotary components. The CP66xx are supplied with a 24 V power supply unit. The microSD card and the lithium battery of the system clock are accessible from the rear in the connector bracket.





CP6606, CP6600 | Panel PC with ARM Cortex[™]-A8

Ordering information	with single-touch screen
7-inch display 800 x 480	CP6606-0001-0020
10.1-inch display 1024 x 600	CP6600-0001-0020

CP6606, CP6600	CP66xx-0001-0020
Housing	aluminium front with steel sheet rear cover
	all connectors at the bottom of the rear side
	1 slot for microSD flash card, accessible from the rear side
	lithium battery of the system clock, accessible from the rear side
	pull-out clamping levers for fast installation without loose parts
	protection class front side IP 54, rear side IP 20
	operating temperature 055 °C

Features	CP66xx-0001-0020
Display	7-, 10.1-inch TFT display
Processor	ARM Cortex [™] -A8, 1 GHz
Motherboard	3½-inch
Slots	-
Free slots	-
Max. card length	-
Memory	1 GB DDR3 RAM
Graphic adapter	integrated in the processor
Ethernet	1 x Ethernet and 1 x EtherCAT on-board
Hard disks/flash	microSD flash card
Power supply	24 V DC
Recommendation	recommended for new projects
Further information	for further options, technical drawings, documentations, etc. see www.beckhoff.com/CP6606

CP67xx | "Economy" built-in Panel PC

www.beckhoff.com/CP67xx

The CP67xx built-in Panel PC series is designed for installation in the front of a control cabinet or control housing. The CP67xx series combines the Beckhoff Control Panel design with state-of-the-art Industrial PC technology. The right display size and keyboard are available for every application. With their highly integrated 3½-inch motherboard the CP67xx built-in Industrial PCs represent a high-performance platform for machine construction and plant engineering applications running the TwinCAT automation software under Windows Embedded Compact Standard 7, Windows Embedded Standard 7, Windows 7 Professional, Windows 7 Ultimate or Windows 10 IoT Enterprise. The PC can be equipped with a 5.7-, 12-, 15- or 19-inch LC display, or as a monitor without keys or with different types of keyboard. Optionally, a touch screen or touch pad is available. In addition, a large





Front laminates



Without keys

Function keys

Numeric keyboard



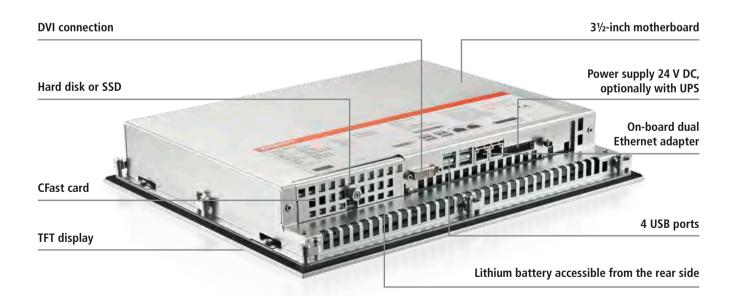
Alphanumeric keyboard

With PLC keys on the sides

number of push-button extensions are available.

A CP67xx Panel PC is equipped with an Intel[®] Celeron[®] ULV 1.4 GHz or with Intel[®] Atom[™] with up to four cores and a CFast card. It contains no rotating parts. In each configuration the fanless Panel PCs of this series are approved for ambient temperatures between 0 and 55 °C.

The CP67xx Panel PCs are supplied with a CFast card and a 2½-inch hard disk or SSD. The CP67xx have a 24 V power supply unit. The data media and the lithium battery for the system clock are accessible from the rear. Due to its two independent Ethernet interfaces, the CP67xx is ideally suited as a compact central processing unit for an EtherCAT control system.





CP67xx | **"Economy" built-in Panel PC** The slimline built-in Industrial PC with 3¹/₂-inch motherboard

Ordering information	without touch screen	with single-touch screen	with touch pad
Display only			
5.7-inch display 640 x 480	CP6707-0000-0050	CP6707-0001-0050	
12-inch display 800 x 600	CP6701-0000-00xx	CP6701-0001-00xx	
15-inch display 1024 x 768	CP6702-0000-00xx	CP6702-0001-00xx	
19-inch display 1280 x 1024	CP6703-0000-00xx	CP6703-0001-00xx	
Display only, USB A socket in the	e front		
12-inch display 800 x 600	CP6701-0020-00xx	CP6701-0021-00xx	
15-inch display 1024 x 768	CP6702-0020-00xx	CP6702-0021-00xx	
19-inch display 1280 x 1024	CP6703-0020-00xx	CP6703-0021-00xx	
With function keys			
12-inch display 800 x 600	CP6711-0000-00xx	CP6711-0001-00xx	
15-inch display 1024 x 768	CP6712-0000-00xx	CP6712-0001-00xx	
19-inch display 1280 x 1024	CP6713-0000-00xx	CP6713-0001-00xx	
Numeric keyboard			
12-inch display 800 x 600	CP6721-0000-00xx	CP6721-0001-00xx	CP6721-0002-00xx
15-inch display 1024 x 768	CP6722-0000-00xx	CP6722-0001-00xx	CP6722-0002-00xx
19-inch display 1280 x 1024	CP6723-0000-00xx	CP6723-0001-00xx	CP6723-0002-00xx
Alphanumeric keyboard			
12-inch display 800 x 600	CP6731-0000-00xx	CP6731-0001-00xx	CP6731-0002-00xx
15-inch display 1024 x 768	CP6732-0000-00xx	CP6732-0001-00xx	CP6732-0002-00xx
19-inch display 1280 x 1024	CP6733-0000-00xx	CP6733-0001-00xx	CP6733-0002-00xx
Alphanumeric keyboard with PLC keys on the sides			
15-inch display 1024 x 768	CP6742-0000-00xx	CP6742-0001-00xx	









Alphanumeric keyboard



Alphanumeric keyboard with PLC keys on the sides

Without keys

Function keys

Numeric keyboard

 CP67xx
 CP67xx-xxxx-0040, -0050

 Housing
 aluminium front with steel sheet rear cover

 drives easily accessible
 all connectors at the bottom of the rear side

 all connectors at the bottom of the rear side
 1 slot for one CFast card accessible from the rear side

 lithium battery of the system clock accessible from the rear side
 pull-out clamping levers for fast installation without loose parts

 protection class front side IP 65, rear side IP 20
 operating temperature 0...55 °C

Features	CP67xx-xxxx-0040	CP67xx-xxxx-0050	
Display	12-, 15- or 19-inch TFT display	5.7-, 12-, 15- or 19-inch TFT display	
Processor	Intel [®] Celeron [®] ULV	Intel [®] Atom™	
Motherboard	31/2-inch	3½-inch	
Slots	optionally 2 PCIe modules or 2 PCI/PCIe plug-in card slots	optionally 2 PCIe modules or 2 PCI/PCIe plug-in card slots	
Free slots	optionally 2 PCIe modules or 2 PCI/PCIe plug-in card slots	optionally 2 PCIe modules or 2 PCI/PCIe plug-in card slots	
Max. card length	optionally 2 PCIe modules or 2 x 190 mm plug-in cards	optionally 2 PCIe modules or 2 x 190 mm plug-in cards	
Memory	28 GB DDR3 RAM	28 GB DDR3L RAM	
Graphic adapter	integrated in the processor	integrated in the processor	
Ethernet	2 on-board	2 on-board	
Hard disks/flash	1 or 2 x 2 ¹ / ₂ -inch HDD, SSD or CFast	1 or 2 x 2 ¹ / ₂ -inch HDD, SSD or CFast	
RAID 1	2 x 2½-inch HDD, SSD or CFast	-	
Power supply	24 V DC	24 V DC	
Recommendation	not recommended for new projects	recommended for new projects	
Further information	for further options, technical drawings, documentations, etc. see www.beckhoff.com/CP67xx		

CP6706, CP6700 | "Economy" built-in Panel PC

www.beckhoff.com/CP6706

www.beckhoff.com/CP6700

With its highly integrated 3½-inch motherboard, the CP6706 and CP6700 built-in Panel PC series is ideally suited for use in mechanical engineering, for example with TwinCAT automation software under Windows Embedded Compact 7, Windows Embedded Standard 7, Windows 7 Professional, Windows 7 Ultimate or Windows 10 IoT Enterprise.

They are designed for installation in the front of a control cabinet and have a 7-inch or 10.1-inch touch screen display. Equipped with an Intel[®] Atom[™] with up to four cores and a CFast card, the CP67xx contain no rotary components.

The CP67xx are supplied with a 24 V power supply unit. The CFast card and the lithium battery of the system clock are accessible from the rear in the connector bracket.





CP6706, CP6700 | Panel PC with Intel[®] Atom[™] with up to four cores

Ordering information	with single-touch screen
7-inch display 800 x 480	CP6706-0001-0050
10.1-inch display 1024 x 600	CP6700-0001-0050

CP6706, CP6700	CP67xx-0001-0050	
Housing	aluminium front with steel sheet rear cover	
	all connectors at the bottom of the rear side	
	1 slot for one CFast card accessible from the rear side	
	lithium battery of the system clock, accessible from the rear side	
	pull-out clamping levers for fast installation without loose parts	
	protection class front side IP 54, rear side IP 20	
	operating temperature 055 °C	
Features	CP67xx-0001-0050	
Display	7-, 10.1-inch TFT display	
Processor	Intel [®] Atom™	
Motherboard	3½-inch	
Slots	-	
Free slots	-	
Max. card length	-	
Memory	28 GB DDR3L RAM	
Graphic adapter	integrated in the processor	
Ethernet	2 on-board	
Hard disks/flash	CFast card	
Power supply	24 V DC	
Recommendation	recommended for new projects	
Further information	for further options, technical drawings, documentations, etc. see www.beckhoff.com/CP6706	

Ordering information	Option
C9900-U214	internal, capacitive 1-second UPS

CP72xx | "Economy" Panel PC with mounting arm

www.beckhoff.com/CP72xx

The CP72xx "Economy" Panel PC series is designed for mounting arm installation. Control Panels form the front of the IP 65 Panel PC. The right display size and keyboard are thus available for every application. The CP72xx Industrial PCs represent a powerful platform for use in machine and plant construction, for example using the TwinCAT automation software under Windows 10 IoT Enterprise. The PC can be equipped with a 12-, 15- or 19-inch LC display as a monitor without keys or with different types of keyboards. Optionally, a touch screen or touch pad is available. In addition, a large number of push-button extensions are available.

Cooling is achieved via cooling ribs between the Control Panel and the add-on PC. A fan inside the closed housing ensures that the heat is distributed evenly. The PC can be operated at up to 45 °C ambient temperature.

The housing is designed for installation on a mounting arm. There is a choice of attaching the mounting arm from above or below. The Panel PC features an integrated rotatable mounting arm adapter for a 48 mm diameter mounting arm tube. Optionally, a rotatable and tiltable mounting arm adapter can be integrated in the Panel PC.



Front laminates



Without keys

Function keys

Numeric keyboard

Alphanumeric keyboard

With PLC keys on the sides

The connecting cables are laid through the mounting arm.

The compact aluminium housing of the CP72xx Panel PCs is equipped with a 31/2-inch Beckhoff Motherboard for Intel[®] Core[™] i3/ i5/i7 processors of the latest generation.

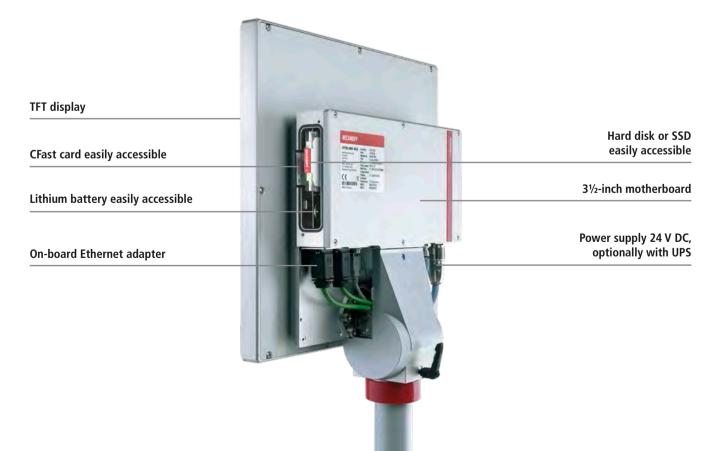
The Industrial PC connections (up to six) with IP 65 connectors are positioned in the large wiring space and are easily accessible. The wiring area can be opened easily without dismounting the device from the mounting

arm, offering fast access to the IP 65 connectors for power supply, Ethernet and optional USB. Prefabricated cables in various lengths are available for all connections.

Due to its two independent Ethernet interfaces the CP72xx is ideally suited as a compact central processing unit for an EtherCAT control system.

The CP72xx series Panel PCs are supplied with a 24 V power supply unit, optionally with integrated uninterruptible power supply (UPS). A battery pack can be connected externally and installed on a DIN rail in the control cabinet.

One or two CFast cards or up to two hard disks or SSDs, as well as the lithium battery for the system clock, are accessible from the rear side underneath a cover. Two hard disks. two SSDs or two CFast cards can be mirrored using the on-board SATA RAID 1 controller.





CP72xx | "Economy" Panel PC The Industrial PC with mounting arm and 3½-inch motherboard

Ordering information	without touch screen	with single-touch screen	with touch pad
Display only			
12-inch display 800 x 600	CP7201-0000-00xx	CP7201-0001-00xx	
15-inch display 1024 x 768	CP7202-0000-00xx	CP7202-0001-00xx	
19-inch display 1280 x 1024	CP7203-0000-00xx	CP7203-0001-00xx	
Display only, USB A socket in the	e front		
12-inch display 800 x 600	CP7201-0020-00xx	CP7201-0021-00xx	
15-inch display 1024 x 768	CP7202-0020-00xx	CP7202-0021-00xx	
19-inch display 1280 x 1024	CP7203-0020-00xx	CP7203-0021-00xx	
With function keys			
12-inch display 800 x 600	CP7211-0000-00xx	CP7211-0001-00xx	
15-inch display 1024 x 768	CP7212-0000-00xx	CP7212-0001-00xx	
19-inch display 1280 x 1024	CP7213-0000-00xx	CP7213-0001-00xx	
Numeric keyboard			
12-inch display 800 x 600	CP7221-0000-00xx	CP7221-0001-00xx	CP7221-0002-00xx
15-inch display 1024 x 768	CP7222-0000-00xx	CP7222-0001-00xx	CP7222-0002-00xx
19-inch display 1280 x 1024	CP7223-0000-00xx	CP7223-0001-00xx	CP7223-0002-00xx
Alphanumeric keyboard			
12-inch display 800 x 600	CP7231-0000-00xx	CP7231-0001-00xx	CP7231-0002-00xx
15-inch display 1024 x 768	CP7232-0000-00xx	CP7232-0001-00xx	CP7232-0002-00xx
19-inch display 1280 x 1024	CP7233-0000-00xx	CP7233-0001-00xx	CP7233-0002-00xx
Alphanumeric keyboard with PLC keys on the sides			
15-inch display 1024 x 768	CP7242-0000-00xx	CP7242-0001-00xx	









Alphanumeric keyboard



Alphanumeric keyboard with PLC keys on the sides

Without keys

Function keys

Numeric keyboard

 CP72xx
 CP72xx-xxxx-0050, -0060

 Housing
 Industrial PC with Control Panel for mounting arm installation

 rotatable mounting arm adapter for Rittal and Rolec mounting arm systems with 48 mm tube from top

 wiring area for up to 6 IP 65 connectors

 1 slot for one 2½-inch hard disk or SSD and 1 slot for one CFast card

 lithium battery of the system clock, changeable from outside

 passive cooling through heat sink structure between Control Panel and add-on PC,

 internal fan for equal heat distribution to all the walls of the housing

 20 cm free space required around the PC for air circulation

 protection class IP 65

 operating temperature 0...45 °C

Features	СР72хх-хххх-0050	CP72xx-xxxx-0060	
Display	12-, 15- or 19-inch TFT display	12-, 15- or 19-inch TFT display	
Processor	Intel [®] Celeron [®] , Core [™] i3/i5/i7 4 th Generation	Intel [®] Celeron [®] , Pentium [®] , Core [™] i3/i5/i7 6 th /7 th Generation	
Motherboard	3½-inch	31/2-inch	
Slots	1 Mini PCI slot	_	
Free slots	1 Mini PCI slot	_	
Max. card length	Mini PCI	-	
Memory	216 GB DDR3L RAM	432 GB DDR4 RAM	
Graphic adapter	integrated in the processor	integrated in the processor	
Ethernet	2 on-board, one of these is led out in the wiring area	2 on-board, one of these is led out in the wiring area	
Hard disks/flash	1 or 2 x 2 ¹ / ₂ -inch HDD or SSD, 1 x 2 ¹ / ₂ -inch HDD or SSD	1 or 2 x 2½-inch HDD or SSD, 1 x 2½-inch HDD or SSD	
	and 1 x CFast or 2 x CFast	and 1 x CFast or 2 x CFast	
RAID 1	2 x 2½-inch HDD or 2 x CFast	2 x 2½-inch HDD or 2 x CFast	
Power supply	24 V DC	24 V DC	
Recommendation	available	recommended for new projects	
Further information	for further options, technical drawings, documentations, etc. see www.beckhoff.com/CP72xx		

CP77xx | "Economy" Panel PC

www.beckhoff.com/CP77xx

The CP77xx Panel PC series is designed for mounting arm installation. Control Panels form the front of the IP 65 Panel PC. The right display size and keyboard are thus available for every application. The CP77xx Industrial PCs represent a powerful platform for use in machine and plant construction, for example using the TwinCAT automation software.

The PC can be equipped with a 12-, 15- or 19-inch LC display, as a monitor without keys or with different types of keyboard. Optionally, a touch screen or touch pad is available. In addition, a large number of push-button extensions are available.

Cooling is achieved directly via the rear panel of the Control Panel. No fan is required. The PC can be operated at up to 45 °C ambient temperature.



Front laminates



Without keys



Function keys

Numeric keyboard



Alphanumeric keyboard

The housing is optionally designed for direct wall mounting or for mounting arm installation. The mounting arm can be attached from above or below. If a mounting arm is used, the connection cables are fed through the mounting arm adapter attached centrally at the rear. Prefabricated cables in various lengths are available for the Ethernet connections.

The compact aluminium housing of the Panel PCs CP77xx is equipped with a Beckhoff motherboard for Intel[®] Celeron[®] ULV.

Due to its two independent gigabit Ethernet interfaces, the CP77xx are ideally suited as a compact central processing unit for an EtherCAT control system.

The CP77xx series Panel PCs are supplied with a 24 V power supply unit. The CFast card and the lithium battery for the system clock are located under a cover and accessible from the rear.





CP77xx | **"Economy" Panel PC** The compact Industrial PC with mounting arm

Ordering information	without touch screen	with single-touch screen	with touch pad
Display only			
12-inch display 800 x 600	CP7701-0000-0040	CP7701-0001-0040	
15-inch display 1024 x 768	CP7702-0000-0040	CP7702-0001-0040	
19-inch display 1280 x 1024	CP7703-0000-0040	CP7703-0001-0040	
Display only, USB A socket in the	e front		
12-inch display 800 x 600	CP7701-0020-0040	CP7701-0021-0040	
15-inch display 1024 x 768	CP7702-0020-0040	CP7702-0021-0040	
19-inch display 1280 x 1024	CP7703-0020-0040	CP7703-0021-0040	
With function keys			
12-inch display 800 x 600	CP7711-0000-0040	CP7711-0001-0040	
15-inch display 1024 x 768	CP7712-0000-0040	CP7712-0001-0040	
19-inch display 1280 x 1024	CP7713-0000-0040	CP7713-0001-0040	
Numeric keyboard			
12-inch display 800 x 600	CP7721-0000-0040	CP7721-0001-0040	CP7721-0002-0040
15-inch display 1024 x 768	CP7722-0000-0040	CP7722-0001-0040	CP7722-0002-0040
19-inch display 1280 x 1024	CP7723-0000-0040	CP7723-0001-0040	CP7723-0002-0040
Alphanumeric keyboard			
12-inch display 800 x 600	CP7731-0000-0040	CP7731-0001-0040	CP7731-0002-0040
15-inch display 1024 x 768	CP7732-0000-0040	CP7732-0001-0040	CP7732-0002-0040
19-inch display 1280 x 1024	CP7733-0000-0040	CP7733-0001-0040	CP7733-0002-0040



Without keys



Function keys



Numeric keyboard



Alphanumeric keyboard

CP77xx	CP77xx-xxxx-0040	
Housing	TFT display in three sizes	
	aluminium housing, protection class IP 65	
	front laminate in four variants	
	special keys identified by slide-in labels	
	for mounting 4 M6 x 18 mm threaded holes in the backplane	
	operating temperature 045 °C	

Features	CP77xx-xxxx-0040
Display	12-, 15- or 19-inch TFT display
Processor	Intel® Celeron® ULV 1.4 GHz
Motherboard	CP format
Memory	2 GB DDR3 RAM
Graphic adapter	integrated in the processor
Ethernet	2 on-board
Hard disks/flash	CFast card
Power supply	24 V DC
Recommendation	available
Further information	for further options, technical drawings, documentations, etc. see www.beckhoff.com/CP77xx

C36xx | Panel PC series

www.beckhoff.com/C36xx

The Panel PC series C36xx, fitted with Intel[®] Celeron[®], Pentium[®] or Core[™] i3/i5/i7 processors of the latest generation on an ATX motherboard, offers controllers of the highest performance class with 12- or 15-inch TFT display, as a display/computer unit optionally with touch screen. The housing is opened from the rear. All components can be reached quickly and easily.

An optional multi DVD drive for commissioning, data backup and software updates are accessible from the rear side. The drives can be removed without tools once the housing has been opened. Card holders for the plug-in cards generate insensitivity to shocks and vibrations. The card holders can be fixed and removed without tools.

The type plate on the rear provides detailed information regarding the PC's configuration. Data on the function and type is listed for the fitted plug-in cards. Data about





C3620



C3640

drives indicates not just the manufacturer and type, but also provides information about type of connection and jumpers.

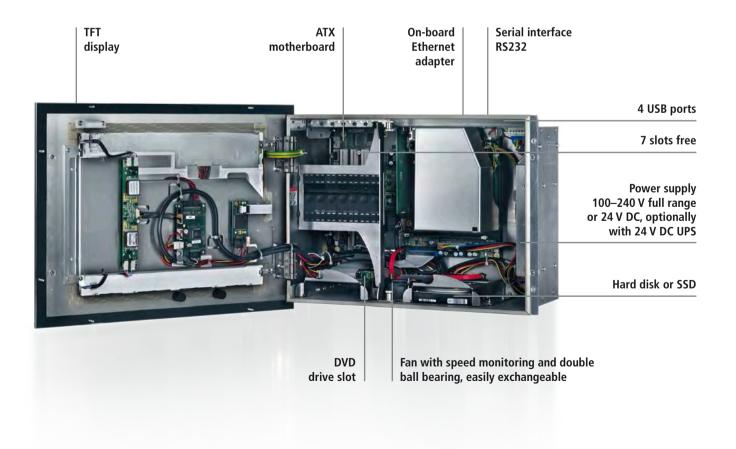
The construction of the housing of the C36xx series accords with the ATX standard, thus ensuring long-term compatibility with

any PC components that will appear in the next few years.

Customer-specific design

For the Industrial PC series represented here, customer-specific designs are available

that will be created according to individual requirements, for example with an individual logo on the front or a completely different design of the front laminate.





C3620 | Panel PC

C3620	C3620-0060, -0070
Housing	built-in housing, 388 x 324 mm
	7-slot processor core for ATX motherboard
	PC to be opened from the back side
	all components easily accessible
	7 slots for up to 220 mm long plug-in cards
	card holders, actuated without tools
	protection class front side IP 65, rear side IP 20
	operating temperature 055 °C
	weight of the basic configuration 11.5 kg (25.4 lbs)
	dimensions (W x H x D) 388 x 324 x 201 mm (15.3" x 12.8" x 7.9"), depth behind front 193 mm (7.6")

Features	C3620-0060	C3620-0070	
Display	12-inch TFT display, resolution 800 x 600	12-inch TFT display, resolution 800 x 600	
Touch screen	single-touch as an option	single-touch as an option	
Processor	Intel [®] Celeron [®] , Core [™] i3/i5/i7 4 th Generation	Intel [®] Celeron [®] , Pentium [®] , Core [™] i3/i5/i7 6 th /7 th Generation	
Motherboard	ATX	ATX	
Slots	7	7	
Free slots	3 PCI, 2 PCIe x1, 1 PCIe x4 and 1 PCIe x16	2 PCI, 2 PCIe x1, 2 PCIe x4 and 1 PCIe x16	
Max. card length	7 x 220 mm	7 x 220 mm	
Memory	232 GB DDR3L RAM	464 GB DDR4 RAM	
Graphic adapter	integrated in the processor	integrated in the processor	
Ethernet	2 on-board	2 on-board	
Hard disks/flash	1 x 3½-inch HDD or 2½-inch SSD	1 x 3½-inch HDD or 2½-inch SSD	
RAID 1	-	-	
Possible disk drives	multi DVD	multi DVD	
Power supply	100240 V AC or 24 V DC	100240 V AC or 24 V DC	
Recommendation	available	available	
Further information	for further options, technical drawings, documentations, etc. see www.beckhoff.com/C3620		



C3640 | Panel PC

C3640	C3640-0060, -0070
Housing	built-in housing, 470 x 348 mm
	7-slot processor core for ATX motherboard
	PC to be opened from the back side
	all components easily accessible
	7 slots for up to 235 mm long plug-in cards
	card holders, actuated without tools
	protection class front side IP 65, rear side IP 20
	operating temperature 055 °C
	weight of the basic configuration 14.1 kg (31.1 lbs)
	dimensions (W x H x D) 470 x 348 x 199 mm (18.5" x 13.7" x 7.8"), depth behind front 191 mm (7.5")

Features	C3640-0060	C3640-0070	
Display	15-inch TFT display, resolution 1024 x 768	15-inch TFT display, resolution 1024 x 768	
Touch screen	single-touch as an option	single-touch as an option	
Processor	Intel [®] Celeron [®] , Core [™] i3/i5/i7 4 th Generation	Intel [®] Celeron [®] , Pentium [®] , Core [™] i3/i5/i7 6 th /7 th Generation	
Motherboard	ATX	ATX	
Slots	7	7	
Free slots	3 PCI, 2 PCIe x1, 1 PCIe x4 and 1 PCIe x16	2 PCI, 2 PCIe x1, 2 PCIe x4 and 1 PCIe x16	
Max. card length	7 x 235 mm	7 x 235 mm	
Memory	232 GB DDR3L RAM	464 GB DDR4 RAM	
Graphic adapter	integrated in the processor	integrated in the processor	
Ethernet	2 on-board	2 on-board	
Hard disks/flash	1–2 x 3½-inch HDD or 2½-inch SSD	1–2 x 3½-inch HDD or 2½-inch SSD	
RAID 1	2 x 3½-inch HDD	2 x 3½-inch HDD	
Possible disk drives	multi DVD	multi DVD	
Power supply	100240 V AC or 24 V DC	100240 V AC or 24 V DC	
Recommendation	available	available	
Further information	for further options, technical drawings, documentations, etc. see www.beckhoff.com/C3640		

Control cabinet Industrial PCs

www.beckhoff.com/Control-cabinet-PC



C6670 | Control cabinet industrial server, 2 x Intel[®] Xeon[®]

See page 116



C61xx | ATX control cabinet Industrial PC, Intel® Celeron®, Pentium® or Core™

See page 98



C62xx | ATX control cabinet Industrial PC, Intel[®] Celeron[®], Pentium[®] or Core™

See page 102



C52xx | 19-inch slide-in Industrial PC, Intel[®] Celeron[®] or Core™

See page 88



C6640/C6650 | ATX control cabinet Industrial PC, Intel[®] Celeron[®], Pentium[®] or Core™



C65xx | Built-in Industrial PC, Intel[®] Celeron[®] or Core™



C6920/C6930 | Compact Industrial PC, Intel® Celeron® or Core™

See page 112







C60xx | Ultra-compact Industrial PC, Intel[®] Atom™

See page 92



C6905/C6915/C6925 | Compact Industrial PC, Intel[®] Celeron[®] ULV or Atom[™]

See page 118

C52xx | Industrial PC series for 19-inch rack installation

www.beckhoff.com/C52xx

The C5210 19-inch slide-in Industrial PC measures only one height unit. This IPC has an Intel[®] Celeron[®] or Core[™] i3/i5/i7 processor of the latest generation on a 3½-inch motherboard with on-board RAID controller and two 3½-inch hard drive removable frames.

The combination of industrially-capable performance and functionality with an

extremely flat design makes the C5210 particularly well-suited for space-saving applications. The low installation height is made possible with the Beckhoff 3¹/₂-inch motherboards. The motherboard is equipped with a multitude of on-board interfaces, such as two Gigabit Ethernet ports, a DVI and a COM port as well as four USB ports. The C5210 can be extended with two PCIe modules. A multi DVD drive can be optionally installed behind the front flap. The following operating systems are offered for the 19-inch Industrial PC depending on the CPU: Windows 7 Professional, Windows 7 Ultimate, Windows Embedded Standard 7 or Windows 10 IoT Enterprise.





C5210



C5240

The C5240 Industrial PC expands the Industrial PC series by a version with four height units and seven PCI and PCIe plug-in card slots in 24 V DC or 110 to 230 V AC versions. The basic configuration includes three 5¼-inch drive bays behind the front flap. As an option, three additional 5¼-inch drive bays are available ex factory. It is designed for installation in a 19-inch rack and is equipped with components of the highest performance class according to the ATX standard.

A Beckhoff industrial motherboard is used with Intel[®] Celeron[®], Pentium[®], Core[™] i3/i5/i7 fourth, sixth or seventh generation processors. The seventh generation requires a Windows 10 64-bit operating system. With the fourth and sixth generation, Windows 7 32-bit or 64-bit can be used too.

The C5240 is ideally suited for use in machine and plant engineering, for example with TwinCAT automation software.





C5210 | 19-inch slide-in Industrial PC

C5210	C5210-0020, -0030
Housing	slide-in housing for 19-inch racks, 1 rack unit
	all drives accessible from the front
	2 removable frames for hard disks
	1 DVD drive slot, 2 USB sockets, reset key and ATX key behind a lockable front flap
	status LEDs
	all connectors at the rear side
	2 PCIe module slots to plug-in Beckhoff PCIe modules or to lead out interfaces of the motherboard ex factory
	protection class IP 20
	operating temperature 055 °C
	dimensions (W x H x D) 482.7 x 44 x 493.8 mm (19" x 1.7" x 19.44")
	depth behind the front 471.3 mm (18.56")

Features	C5210-0020	C5210-0030
Processor	Intel [®] Celeron [®] , Core™ i3/i5/i7 4 th Generation	Intel [®] Celeron [®] , Pentium [®] , Core [™] i3/i5/i7 6 th /7 th Generation
Motherboard	3½-inch	3½-inch
Slots	1 Mini PCI and 2 PCIe modules	-
Free slots	1 Mini PCI and 2 PCIe modules	-
Max. card length	Mini PCI/PCIe module	-
Memory	216 GB DDR3L RAM	432 GB DDR4 RAM
Graphic adapter	integrated in the processor	integrated in the processor
Ethernet	2 on-board	2 on-board
Hard disks/flash	1–2 x 3½-inch HDD or 2½-inch SSD	1–2 x 3½-inch HDD or 2½-inch SSD
RAID 1	2 x 3½-inch HDD	2 x 3½-inch HDD
Possible disk drives	multi DVD	multi DVD
Power supply	100240 V AC or 24 V DC	100240 V AC or 24 V DC
Recommendation	available	recommended for new projects
Further information	for further options, technical drawings, documentations, etc. see www.beckhoff.com/C5210	



C5240 | 19-inch slide-in Industrial PC

C5240	C5240-0000, -0010
Housing	7-slot slide-in housing ATX for 19-inch racks, 4 rack units
	all slots for full-length plug-in cards
	lockable front flap
	card holders
	protection class IP 50
	operating temperature 055 °C
	weight of the basic configuration 17.0 kg (37.5 lbs)
	dimensions (W x H x D) 482 x 177 x 511 mm (19" x 7" x 20.1")
	depth behind the front 471.3 mm (18.56")

Features	C5240-0000	C5240-0010
Processor	Intel [®] Celeron [®] , Core [™] i3/i5/i7 4 th Generation	Intel [®] Celeron [®] , Pentium [®] , Core [™] i3/i5/i7 6 th /7 th Generation
Motherboard	ATX	ATX
Slots	7	7
Free slots	3 PCI, 2 PCIe x1, 1 PCIe x4 and 1 PCIe x16	2 PCI, 2 PCIe x1, 2 PCIe x4 and 1 PCIe x16
Max. card length	7 x fullsize	7 x fullsize
Memory	232 GB DDR3L RAM	464 GB DDR4 RAM
Graphic adapter	integrated in the processor	integrated in the processor
Ethernet	2 on-board	2 on-board
Hard disks/flash	1–6 x 3 ¹ / ₂ -inch HDD or 2 ¹ / ₂ -inch SSD	1–6 x 3½-inch HDD or 2½-inch SSD
RAID 1	2 x 3 ¹ / ₂ -inch HDD	2 x 3½-inch HDD
Possible disk drives	CD/DVD ROM or multi DVD	CD/DVD ROM or multi DVD
Power supply	100240 V AC or 24 V DC	100240 V AC or 24 V DC
Recommendation	available	recommended for new projects
Further information	for further options, technical drawings, documentations, etc. see www.beckhoff.com/C5240	

C60xx | Ultra-compact Industrial PC series

www.beckhoff.com/C60xx

The series of ultra-compact Industrial PCs that was launched with the C6015 has been highly successfully positioned in the market because of its flexible application possibilities. With the addition of the C6030 ultracompact Industrial PC, the many benefits of the series such as low space requirements, universal applicability for almost any automation and visualisation task as well as flexible installation are also available for complex applications with the highest performance requirements. Intel[®] Core[™] i processors of the 6th and 7th Generation are used. In this compact size they offer previously unattained CPU performances of up to 3.9 GHz with two cores or 3.4 GHz with four cores. For fine-granular scalability there is a choice of eight different CPU types available. As the latest addition to the product family, the C6017 multi-core device offers further optional interfaces (up to 2 x RJ45, 2 x USB 2.0), an optional 1-second UPS, or a combination of additional interfaces and UPS, all in a housing that still measures only 82 x 82 x 66 millimeters.

Besides an excellent price-performance ratio, the PCs offer all common industry







C6015

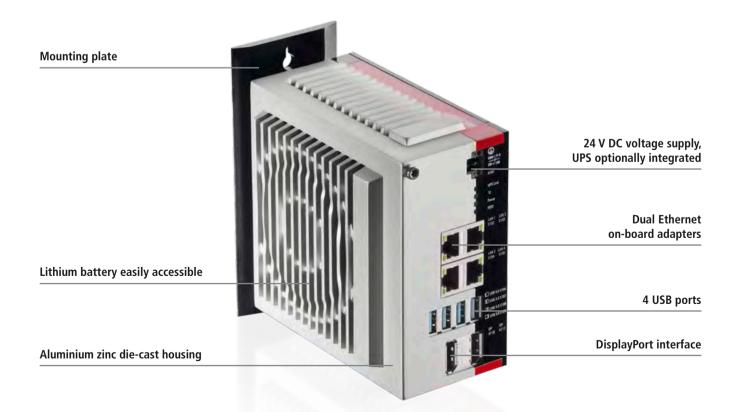


C6017



standard features such as a high temperature range, EtherCAT compatibility and high resistance to vibration and shocks. Only processors with long-term availability are used in the C60xx series, ensuring a future-proof investment for the user. Both the new compact motherboard and the combined die-cast zinc and aluminium housing have been developed to ensure the high quality Beckhoff is wellknown for, such as industrial compatibility, reliability and products made in Germany.

The extremely flexible mounting concept of the C60xx enables both vertical and horizontal rear wall mounting in the control cabinet. In addition, the symmetrical heat sink of the C6015 allows it to be freely positioned in the corresponding mounting frame. This makes a versatile range of mounting scenarios possible, even in the tightest of mounting spaces, with free orientation of the connection level concentrated on one side, which can be aligned in this way precisely to the direction of the incoming cables.







C6015 for installation at the side wall

C6015 | Ultra-compact Industrial PC

C6015	C6015-0010
Housing	fanless industrial PC for space-saving control cabinet installation
	mounting sheet at the rear wall
	all connectors on the same level
	flexible mounting mechanism for the free alignment of the connecting area
	aluminium zinc die-cast housing
	status LEDs
	lithium battery easily accessible
	1 slot for one M.2 SSD easily accessible
	passive, fanless cooling with one-sided cool plate
	5 cm (2") free space on top and bottom of the PC necessary for air circulation
	protection class IP 20
	operating temperature 055 °C
	compact dimensions (W x H x D) 82 x 82 x 40 mm (3.2" x 3.2" x 1.6") without mounting plate

Features	C6015-0010
Processor	Intel [®] Atom™
Motherboard	compact motherboard
Slots	-
Free slots	-
Max. card length	-
Memory	24 GB DDR3L RAM
Graphic adapter	integrated in the processor
Ethernet	2 on-board
Hard disks/flash	M.2 SSD
Power supply	24 V DC
Recommendation	recommended for new projects
Further information	for further options, technical drawings, documentations, etc. see www.beckhoff.com/C6015



C6017 | Ultra-compact Industrial PC

C6017	C6017-0010
Housing	fanless industrial PC for space-saving control cabinet installation
	housing prepared for ex work installation of further configurations
	mounting plate on the rear wall
	all connectors on the same level
	flexible mounting mechanism for the free alignment of the connecting area
	aluminium zinc die-cast housing
	status LEDs
	lithium battery easily accessible
	1 slot for one M.2 SSD easily accessible
	passive, fanless cooling with one-sided cool plate
	5 cm (2") free space on top and bottom of the PC necessary for air circulation
	protection class IP 20
	operating temperature 055 °C
	compact dimensions (W x H x D) 82 x 82 x 66 mm (3.2" x 3.2" x 2.6") without mounting plate

Features	C6017-0010
Processor	Intel [®] Atom [™]
Motherboard	compact motherboard
Slots	-
Free slots	-
Max. card length	-
Memory	24 GB DDR3L RAM
Graphic adapter	integrated in the processor
Ethernet	2 on-board
Hard disks/flash	M.2 SSD
Power supply	24 V DC
Recommendation	recommended for new projects
Further information	for further options, technical drawings, documentations, etc. see www.beckhoff.com/C6017

Industrial PC

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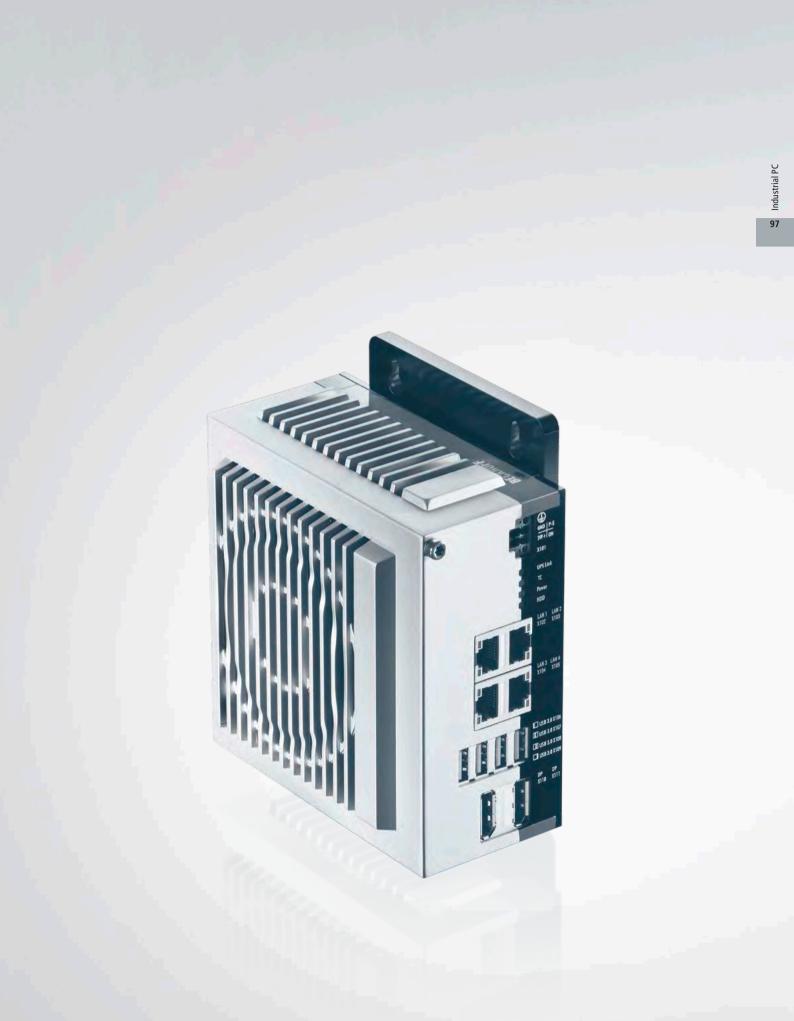
C6030 for

the rear wall

C6030 | Ultra-compact Industrial PC

C6030	C6030-0060
Housing	Industrial PC for space-saving control cabinet installation
	mounting plate on the rear wall for the free alignment of the connecting area
	all connectors on the same level
	flexible mounting mechanism for the free alignment of the connecting area
	aluminium zinc die-cast housing
	status LEDs
	lithium battery easily accessible under the side cover
	2 slots for M.2 SSDs easily accessible under the side cover
	controlled fan with speed monitoring and double ball bearings, exchangeable
	5 cm (2") free space required around the PC for air circulation
	protection class IP 20
	operating temperature 050 °C
	compact dimensions (W x H x D) 129 x 133 x 76 mm (5.2" x 5.2" x 2.6") without mounting plate

Features	C6030-0060
Processor	Intel [®] Celeron [®] , Pentium [®] , Core™ i3/i5/i7 6 th /7 th Generation
Motherboard	compact motherboard
Slots	-
Free slots	-
Max. card length	-
Memory	432 GB DDR4 RAM
Graphic adapter	integrated in the processor
Ethernet	2 on-board
Hard disks/flash	2 x M.2 SSD
Power supply	24 V DC
Recommendation	recommended for new projects
Further information	for further options, technical drawings, documentations, etc. see www.beckhoff.com/C6030



C61xx | Industrial PC series for control cabinet installation

www.beckhoff.com/C61xx

The C61xx control cabinet PC is equipped with maximum performance class components with Intel[®] Celeron[®], Pentium[®] or Core[™] i3/i5/i7 of the latest generation on an ATX motherboard. The PCs in the C61xx series are constructed according to a uniform plan, optimised for the exploitation of available space and easy accessibility of all components. The construction of the housing for the C61xx series ensures long-term compatibility with any new PC components that appear over the next few years. If, in a few years, the Industrial PC needs to be upgraded, you swap the motherboard, the processor, the memory or the hard disk, but the housing remains unchanged and is compatible with the technology of the future. All the PC's connections face upwards, so that the connecting cable can be taken directly to the wiring channel. The side walls are completely passive and allow the Industrial PC to be fitted immediately next to other control cabinet devices.

The housing permits fast access to the fitted components. After removing the front cover, plug-in cards and drives are freely



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C6150

accessible. Hard disks are held by springloaded ball catches and can be removed in a single action. Three screws must be undone, after which the PC's inner chassis, to which all the components are attached, can be removed from the outer housing. The inner chassis can be placed on a table in any orientation for maintenance purposes. When removed, the inner chassis still has

the full function of a PC and can be operated with a standard monitor and a standard keyboard.

The C61xx series PCs are supplied with a 100 to 240 V AC full range or 24 V DC power supply unit. An industrial latching socket strip is used for the power supply. A CD/DVD ROM or multi DVD drive can be fitted. Card holders for the plug-in cards generate insensitivity to

shocks and vibrations. The card holders can be fixed and removed without tools.

A type plate is located on the front cover behind an inspection window, giving detailed information about the configuration of the PC. The construction of the housing has been designed to allow individual adaptation, and many features can be adjusted for your application.



Serial interface RS232



C6140 | Control cabinet Industrial PC

C6140	C6140-0060, -0070
Housing	7-slot ATX Industrial PC for control cabinet installation
	3 slots for plug-in cards with a length of up to 270 mm and 4 slots for plug-in cards with a length of up to 240 mm
	drives and plug-in cards easily accessible
	all connectors on the top
	detailed PC configuration information on the front
	status LEDs and protected reset key
	card holders, actuated without tools
	protection class IP 20
	operating temperature 055 °C
	weight of the basic configuration 14 kg (30.9 lbs)
	dimensions (W x H x D) 383 x 362 x 265 mm (14.9" x 14.1" x 10.5")

Features	C6140-0060	C6140-0070
Processor	Intel [®] Celeron [®] , Core [™] i3/i5/i7 4 th Generation	Intel [®] Celeron [®] , Pentium [®] , Core [™] i3/i5/i7 6 th /7 th Generation
Motherboard	ATX	ATX
Slots	7	7
Free slots	3 PCI, 2 PCIe x1, 1 PCIe x4 and 1 PCIe x16	2 PCI, 2 PCIe x1, 2 PCIe x4 and 1 PCIe x16
Max. card length	3 x 270 mm and 4 x 240 mm	3 x 270 mm and 4 x 240 mm
Memory	232 GB DDR3L RAM	464 GB DDR4 RAM
Graphic adapter	integrated in the processor	integrated in the processor
Ethernet	2 on-board	2 on-board
Hard disks/flash	1–3 x 3½-inch HDD or 2½-inch SSD	1–3 x 3½-inch HDD or 2½-inch SSD
RAID 1	2 x 3½-inch HDD	2 x 3½-inch HDD
Possible disk drives	CD/DVD ROM or multi DVD	CD/DVD ROM or multi DVD
Power supply	100240 V AC or 24 V DC	100240 V AC or 24 V DC
Recommendation	available	recommended for new projects
Further information	for further options, technical drawings, documentations, etc. see www.beckhoff.com/C6140	



C6150 | Control cabinet Industrial PC

C6150	C6150-0060, -0070
Housing	7-slot ATX Industrial PC for control cabinet installation
	all slots for full-length plug-in cards
	drives and plug-in cards easily accessible
	all connectors on the top
	detailed PC configuration information on the front
	status LEDs and protected reset key
	card holders, actuated without tools
	protection class IP 20
	operating temperature 055 °C
	weight of the basic configuration 15 kg (33.1 lbs)
	dimensions (W x H x D) 383 x 423 x 265 mm (15.1" x 16.7" x 10.5")

Features	C6150-0060	C6150-0070
Processor	Intel [®] Celeron [®] , Core [™] i3/i5/i7 4 th Generation	Intel [®] Celeron [®] , Pentium [®] , Core [™] i3/i5/i7 6 th /7 th Generation
Motherboard	ATX	ATX
Slots	7	7
Free slots	3 PCI, 2 PCIe x1, 1 PCIe x4 and 1 PCIe x16	2 PCI, 2 PCIe x1, 2 PCIe x4 and 1 PCIe x16
Max. card length	7 x fullsize	7 x fullsize
Memory	232 GB DDR3L RAM	464 GB DDR4 RAM
Graphic adapter	integrated in the processor	integrated in the processor
Ethernet	2 on-board	2 on-board
Hard disks/flash	1–3 x 3½-inch HDD or 2½-inch SSD	1–3 x 3½-inch HDD or 2½-inch SSD
RAID 1	2 x 3½-inch HDD	2 x 3½-inch HDD
Possible disk drives	CD/DVD ROM or multi DVD	CD/DVD ROM or multi DVD
Power supply	100240 V AC or 24 V DC	100240 V AC or 24 V DC
Recommendation	available	recommended for new projects
Further information	for further options, technical drawings, documentations, etc. see www.beckhoff.com/C6150	

C62xx | Industrial PC series for control cabinet installation

www.beckhoff.com/C62xx

The control cabinet PC series C62xx is equipped with maximum performance class components: with Intel[®] Celeron[®], Pentium[®] or Core[™] i3/i5/i7 of the latest generation on an ATX motherboard. The PCs in the C62xx series are constructed according to a uniform plan, optimised for the exploitation of available space and easy accessibility of all components. The construction of the housing for the C62xx series ensures long-term compatibility with any new PC components that appear over the next few years. If, in a few years, the Industrial PC needs to be upgraded, you swap the motherboard, the processor, the memory or the hard disk, but the housing remains unchanged, and is compatible with the technology of the future. All the PC's connections face to the front. The inner chassis can be drawn out forward on telescopic rails, thus offering free access to all the fitted components.

The C62xx series PCs are offered with a 100 to 240 V AC full range or 24 V DC power supply unit. An industrial latching socket strip is used for the power supply.









Card holders for the plug-in cards generate insensitivity to shocks and vibrations. The card holders can be fixed and removed without tools. Data describing the function and type for the fitted plug-in cards is listed on the front.





DVD drive slot

Power supply 100–240 V full range or 24 V DC, optionally with 24 V DC UPS

Passive side wall: fitting possible immediately next to other devices

7 free slots

Fan with speed monitoring and double ball bearing, easily exchangeable

Serial interface RS232



ATX industrial motherboard

Inner chassis can be pulled forward

All connections on the front

On-board Ethernet adapter

4 USB ports



C6240 | Control cabinet Industrial PC

C6240	C6240-0060, -0070
Housing	7-slot ATX Industrial PC for control cabinet installation
	mounting sheet for horizontal PC installation
	all slots for plug-in cards with a length of up to 190 mm
	drives and plug-in cards easily accessible
	all connectors on the front
	detailed PC configuration information on the front
	status LEDs and protected reset key
	card holders, actuated without tools
	protection class IP 20
	operating temperature 055 °C
	weight of the basic configuration 12.3 kg (27.2 lbs)
	dimensions (W x H x D) 430 x 170 x 274 mm (16.9" x 6.7" x 10.8")

Features	C6240-0060	C6240-0070
Processor	Intel [®] Celeron [®] , Core™ i3/i5/i7 4 th Generation	Intel [®] Celeron [®] , Pentium [®] , Core [™] i3/i5/i7 6 th /7 th Generation
Motherboard	ATX	ATX
Slots	7	7
Free slots	3 PCI, 2 PCIe x1, 1 PCIe x4 and 1 PCIe x16	2 PCI, 2 PCIe x1, 2 PCIe x4 and 1 PCIe x16
Max. card length	7 x 190 mm	7 x 190 mm
Memory	232 GB DDR3L RAM	464 GB DDR4 RAM
Graphic adapter	integrated in the processor	integrated in the processor
Ethernet	2 on-board	2 on-board
Hard disks/flash	1 x 3½-inch HDD or 2 x 2½-inch HDD or SSD	1 x 3 ¹ / ₂ -inch HDD or 2 x 2 ¹ / ₂ -inch HDD or SSD
RAID 1	2 x 2½-inch HDD	2 x 2½-inch HDD
Possible disk drives	multi DVD	multi DVD
Power supply	100240 V AC or 24 V DC	100240 V AC or 24 V DC
Recommendation	available	recommended for new projects
Further information	for further options, technical drawings, documentations, etc.	see www.beckhoff.com/C6240



C6250 | Control cabinet Industrial PC

C6250	C6250-0070, -0080
Housing	7-slot ATX Industrial PC for control cabinet installation
	mounting sheet for horizontal installation
	4 slots for plug-in cards with a length of up to 220 mm and 3 slots for plug-in cards with a length of up to 190 mm
	drives and plug-in cards easily accessible
	all connectors on the front
	detailed PC configuration information on the front
	status LEDs and protected reset key
	card holders, actuated without tools
	protection class IP 20
	operating temperature 055 °C
	weight of the basic configuration 19.8 kg (43.7 lbs)
	dimensions (W x H x D) 680 x 184 x 270 mm (26.8" x 7.2" x 10.7")

Features	C6250-0070	C6250-0080
Processor	Intel [®] Celeron [®] , Core [™] i3/i5/i7 4 th Generation	Intel [®] Celeron [®] , Pentium [®] , Core [™] i3/i5/i7 6 th /7 th Generation
Motherboard	ATX	ATX
Slots	7	7
Free slots	3 PCI, 2 PCIe x1, 1 PCIe x4 and 1 PCIe x16	2 PCI, 2 PCIe x1, 2 PCIe x4 and 1 PCIe x16
Max. card length	7 x 190 mm	7 x 190 mm
Memory	232 GB DDR3L RAM	464 GB DDR4 RAM
Graphic adapter	integrated in the processor	integrated in the processor
Ethernet	2 on-board	2 on-board
Hard disks/flash	1–3 x 3½-inch HDD or 2½-inch SSD	1–3 x 3½-inch HDD or 2½-inch SSD
RAID 1	2 x 3½-inch HDD	2 x 3½-inch HDD
Possible disk drives	CD/DVD ROM or multi DVD	CD/DVD ROM or multi DVD
Power supply	100240 V AC or 24 V DC	100240 V AC or 24 V DC
Recommendation	available	available
Further information	for further options, technical drawings, documentations, etc.	see www.beckhoff.com/C6250

C65xx | Industrial PC series for control cabinet installation

www.beckhoff.com/C65xx

The C65xx Industrial PC series is designed to be installed in control cabinet walls or in the rear panel of a control housing or console housing. The heat sink of the Industrial PC is fed to the outside through a suitable cut-out in the panel or wall of the control cabinet. Power dissipation from the processor and chipset takes place directly to ambient. Integrated seals provide for an IP 65 closure. This enables high thermal stability and at the same time fanless operation. Industrial PCs of type C65xx are thus completely without rotating parts. Installation in a control housing in combination with a Beckhoff Control Panel results in a fanless Panel PC that can be operated at ambient temperatures up to 45 °C. The compact housing is equipped with a $3\frac{1}{2}$ -inch motherboard for Intel® Celeron® or CoreTM i3/i5/i7 of the latest generation. All of the PC's connectors are located on the top of the housing. The C65xx series PCs are supplied with an integrated power supply unit with 24 V DC input voltage, optionally with integrated uninterruptible power







C6515 basic configuration



C6515 with PCIe module slots



C6525 basic configuration



C6525 with PCIe module slots



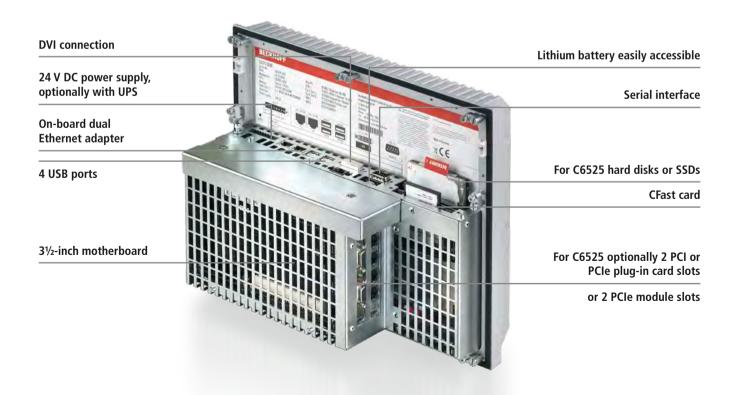
C6525 with plug-in card slots

supply (UPS). A battery pack can be connected externally and installed on a DIN rail close to the PC.

Industrial PCs from this series and Beckhoff Control Panels as control units make an ideal combination for high-performance control platforms in mechanical engineering applications, particularly in conjunction with TwinCAT automation software under Windows 10 IoT Enterprise. Due to their two independent Ethernet interfaces the C6515 and C6525 Industrial PCs are ideally suited as compact central processing units for an EtherCAT control system.

The on-board SATA RAID 1 controller can mirror two hard disks, two SSDs or two CFast

cards. If one of the RAID disks fails, the system continues to run. The faulty data medium can be replaced and mirrored during operation.





C6515 | Fanless built-in Industrial PC

C6515	C6515-0050, -0060
Housing	built-in Industrial PC with external cooling to be mounted in the back panel of a control housing
	or in the wall of a control cabinet
	2 slots for CFast
	CFast and lithium battery of the system clock easily exchangeable
	passive cooling through heat sink structure outside
	20 cm free space required around the heat sink of the PC for air circulation
	protection class outside IP 65, inside IP 20
	operating temperature outside 045 °C, inside 055 °C
	weight of the basic configuration 3 kg (6.61 lbs)
	dimensions (W x H x D) 240 x 230 x 81 mm (9.5" x 9.1" x 3.2")

Features	C6515-0050	C6515-0060	
Processor	Intel [®] Celeron [®] , Core™ i3/i5/i7 4 th Generation	Intel [®] Celeron [®] , Pentium [®] , Core™ i3/i5/i7 6 th /7 th Generation	
Motherboard	3½-inch	31/2-inch	
Slots	1 Mini PCI, optionally 2 PCIe modules	_	
Free slots	1 Mini PCI for NOVRAM and optionally 2 PCIe modules	_	
Max. card length	Mini PCI, optionally 2 PCIe modules	-	
Memory	216 GB DDR3L RAM	432 GB DDR4 RAM	
Graphic adapter	integrated in the processor	integrated in the processor	
Ethernet	2 on-board	2 on-board	
Hard disks/flash	1 or 2 x CFast	1 or 2 x CFast	
RAID 1	2 x CFast	2 x CFast	
Power supply	24 V DC	24 V DC	
Recommendation	available	recommended for new projects	
Further information	for further options, technical drawings, documentations, etc	for further options, technical drawings, documentations, etc. see www.beckhoff.com/C6515	



Extension for PCIe modules

The built-in PCs C6515 can be expanded by two additional PCIe module slots. The inner enclosure cover has a 26 mm deep recess to accomodate PCIe modules (see above). The module slots can accept Beckhoff PCIe modules, for example, the FC9062. Module slots also enable the usage of field bus cards e.g. FC3161 or FC9361.



PCIe module FC9062, dual gigabit Ethernet

Ordering information	Options for C6515	
С9900-В502	2 PCIe module slots integrated inside C6515, to plug-in Beckhoff PCIe modules or to lead out interfaces	
	of the motherboard ex factory. The depth of the inner enclosure cover is increased by 26 mm (1").	



C6525 | Fanless built-in Industrial PC

C6525	C6525-0050, -0060
Housing	built-in Industrial PC with external cooling to be mounted in the back panel of a control housing
	or in the wall of a control cabinet
	1 slot for a 2½-inch hard disk or SSD and 1 slot for CFast
	hard disk, SSD, CFast and lithium battery of the system clock easily exchangeable
	passive cooling through heat sink structure outside
	20 cm free space required around the heat sink of the PC for air circulation
	protection class outside IP 65, inside IP 20
	operating temperature outside 045 °C, inside 055 °C
	weight of the basic configuration 5.9 kg (13.0 lbs)
	dimensions (W x H x D) 330 x 275 x 82 mm (13" x 10.8" x 3.2")

Features	C6525-0050	C6525-0060
Processor	Intel [®] Celeron [®] , Core [™] i3/i5/i7 4 th Generation	Intel [®] Celeron [®] , Pentium [®] , Core™ i3/i5/i7 6 th /7 th Generation
Motherboard	3½-inch	3½-inch
Slots	1 Mini PCI, optionally 2 PCIe modules	-
	or 2 plug-in card slots	
Free slots	1 Mini PCI and optionally 2 PCIe modules	-
	or 2 PCI/PCIe plug-in card slots	
Max. card length	Mini PCI, optionally 2 PCIe modules	-
	or 2 x 190 mm plug-in cards	
Memory	216 GB DDR3L RAM	432 GB DDR4 RAM
Graphic adapter	integrated in the processor	integrated in the processor
Ethernet	2 on-board	2 on-board
Hard disks/flash	2 ¹ / ₂ -inch HDD or SSD and/or CFast or	2 ¹ / ₂ -inch HDD or SSD and/or CFast or
	2 x CFast or 2 x 2 ¹ / ₂ -inch HDD or SSD	2 x CFast or 2 x 21/2-inch HDD or SSD
RAID 1	2 x 2 ¹ / ₂ -inch HDD or 2 x CFast	2 x 2½-inch HDD or 2 x CFast
Power supply	24 V DC	24 V DC
Recommendation	available	recommended for new projects
Further information	for further options, technical drawings, documentations, etc. see www.beckhoff.com/C6525	



Extension for PCIe modules

The built-in PCs C6525 can be expanded by two additional PCIe module slots. The inner enclosure cover has a 27 mm deep recess to accommodate PCIe modules (see above). The module slots can accept Beckhoff PCIe modules, for example, the FC9062. Module slots also enable the usage of field bus cards e.g. FC3161 or FC9361.

Ordering information	Options for C6525	
С9900-В503	2 PCIe module slots integrated inside C6525, to plug-in Beckhoff PCIe modules or to lead out interfaces	
	of the motherboard ex factory. The depth of the inner enclosure cover is increased by 27 mm (1.1").	

Extension for PCI and PCIe plug-in cards

The built-in PCs C6525 can be expanded by two slots for standard PC plug-in cards. They can accept conventional PC plug-in cards up to 190 mm in length. The 58 mm deeper hood at the rear (see above) covers a backplane that provides a choice of two PCI slots, two PCI Express slots or one PCI and one PCI Express slot. Card holders ensure the secure fixation of large cards.

Ordering information	Options for C6525
С9900-В505	2 PCIe plug-in card slots on the passive backplane integrated inside C6525, to plug-in PCIe x1 cards
	up to 190 mm (6.3") length. The depth of the inner enclosure cover is increased by 58 mm (2.3").
C9900-B509	2 PCI plug-in card slots on the passive backplane integrated inside C6525, to plug-in PCI cards
	up to 190 mm (6.3") length, the depth of the inner enclosure cover is increased by 58 mm (2.3").
C9900-B513	1 PCI and 1 PCIe plug-in card slot on a passive backplane integrated inside C6525, to plug-in one PCI
	and one PCIe x1 card up to 190 mm (6.3") length. The depth of the back cover is increased by 58 mm (2.3").

C6640/C6650 | Industrial PC series for control cabinet installation

www.beckhoff.com/C66xx

The C6640/C6650 control cabinet PC series includes two devices, both of which are equipped with top-performance components with Intel[®] Celeron[®], Pentium[®] or Core[™] i3/i5/i7 of the latest generation on an ATX motherboard. All slots are available for plug-in cards with a length of up to 210 mm. Graphics and Ethernet adapters are already available on-board, without taking up a slot.

All PC connections face upwards, so that the connecting cable can be taken directly to the wiring channel. The side walls are completely passive, and allow the Industrial PC to be fitted immediately next to other control cabinet devices. The C6640/C6650 series is designed for optimum space utilisation and easy accessibility of all components. The C6640 is the most compact PC with ATX motherboard but nevertheless offers convenient access to drives, memory and plug-in cards.

The C6650 features hard drive removable frames which, together with the on-board





C6650

RAID controller, form a RAID 1 system with two mirrored hard disks. This ensures high data security. Hard disks which failed can easily be exchanged during operation.

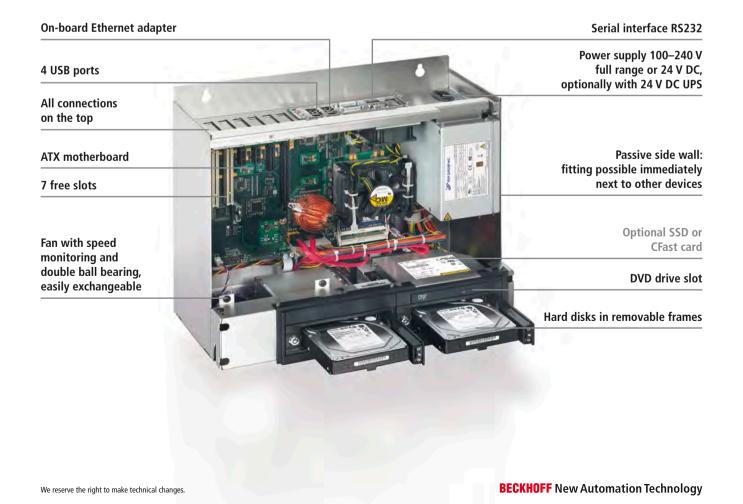
The housing design of the C6640/C6650 series ensures long-term compatibility with new PC components. The motherboard, processor, memory or hard disk are upgradable, while the same housing can be used for years to come.

The device can be equipped with a multi DVD drive. A choice of a CFast socket or a 2½-inch SSD slot is offered for a flash disk. Card holders for the plug-in cards ensure resistance to impacts and vibrations. The C6640/C6650 series PCs are supplied

with 100 to 240 V AC full range or 24 V DC power supply unit.

A type plate is located on the top of the front cover, giving detailed information about the PC configuration.

The housing design offers plenty of scope for adjustment to the respective application.





C6640 | Control cabinet Industrial PC

C6640	C6640-0040, -0050
Housing	7-slot ATX Industrial PC for control cabinet installation
	all slots for up to 210 mm long plug-in cards
	drives and plug-in cards easily accessible
	2 brackets to led out serial interfaces
	all connectors on the top
	detailed PC configuration information on the front
	card holders, actuated without tools
	protection class IP 20
	operating temperature 055 °C
	weight of the basic configuration 11 kg (24.3 lbs)
	dimensions (W x H x D) 371 x 336 x 198 mm (14.6" x 13.2" x 7.8")

Features	C6640-0040	C6640-0050
Processor	Intel [®] Celeron [®] , Core™ i3/i5/i7 4 th Generation	Intel [®] Celeron [®] , Pentium [®] , Core [™] i3/i5/i7 6 th /7 th Generation
Motherboard	ATX	ATX
Slots	7	7
Free slots	3 PCI, 2 PCIe x1, 1 PCIe x4 and 1 PCIe x16	2 PCI, 2 PCIe x1, 2 PCIe x4 and 1 PCIe x16
Max. card length	7 x 210 mm	7 x 210 mm
Memory	232 GB DDR3L RAM	464 GB DDR4 RAM
Graphic adapter	integrated in the processor	integrated in the processor
Ethernet	2 on-board	2 on-board
Hard disks/flash	1 x 3½-inch and 1 x 2½-inch HDD or SSD or CFast	1 x 3½-inch and 1 x 2½-inch HDD or SSD or CFast
RAID 1	-	-
Possible disk drives	multi DVD	multi DVD
Power supply	100240 V AC or 24 V DC	100240 V AC or 24 V DC
Recommendation	available	recommended for new projects
Further information	for further options, technical drawings, documentations, etc.	see www.beckhoff.com/C6640



C6650 | Control cabinet Industrial PC

C6650	C6650-0040, -0050
Housing	7-slot ATX Industrial PC for control cabinet installation
	all slots for up to 210 mm long plug-in cards
	2 removable frames for hard disks
	drives and plug-in cards easily accessible
	3 brackets to led out serial interfaces
	all connectors on the top
	detailed PC configuration information on the front
	card holders, actuated without tools
	protection class IP 20
	operating temperature 055 °C
	weight of the basic configuration 12 kg (26.5 lbs)
	dimensions (W x H x D) 410 x 360 x 201 mm (16.1 " x 14.2 " x 7.9")

Features	C6650-0040	C6650-0050
Processor	Intel [®] Celeron [®] , Core [™] i3/i5/i7 4 th Generation	Intel [®] Celeron [®] , Pentium [®] , Core [™] i3/i5/i7 6 th /7 th Generation
Motherboard	ATX	ATX
Slots	7	7
Free slots	3 PCI, 2 PCIe x1, 1 PCIe x4 and 1 PCIe x16	2 PCI, 2 PCIe x1, 2 PCIe x4 and 1 PCIe x16
Max. card length	7 x 210 mm	7 x 210 mm
Memory	232 GB DDR3L RAM	464 GB DDR4 RAM
Graphic adapter	integrated in the processor	integrated in the processor
Ethernet	2 on-board	2 on-board
Hard disks/flash	1–2 x 3½-inch and 1 x 2½-inch HDD or SSD or CFast	1–2 x 3½-inch and 1 x 2½-inch HDD or SSD or CFast
RAID 1	2 x 3½-inch HDD	2 x 3½-inch HDD
Possible disk drives	multi DVD	multi DVD
Power supply	100240 V AC or 24 V DC	100240 V AC or 24 V DC
Recommendation	available	recommended for new projects
Further information	for further options, technical drawings, documentations, etc.	see www.beckhoff.com/C6650

C6670 | Industrial server for control cabinet installation

www.beckhoff.com/C6670

The C6670 and a Beckhoff Control Panel with DVI and USB connection make an ideal combination, representing a powerful platform for machine construction and plant engineering applications with the TwinCAT automation software.

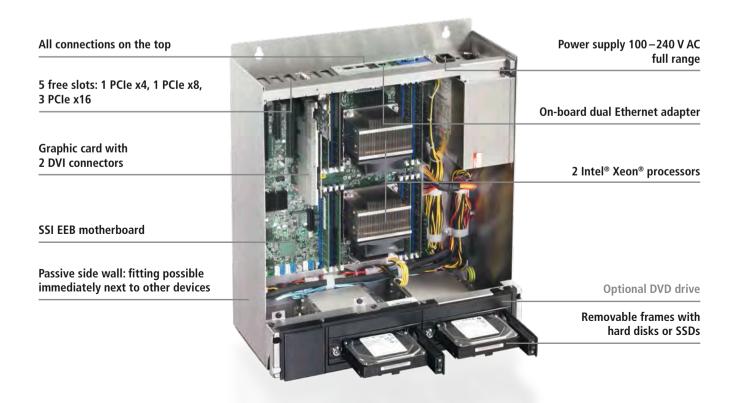
In combination with TwinCAT 3, two Intel[®] Xeon[®] processors, each with 6, 8, 12, 16 or 20 cores on one motherboard with two Gigabit Ethernet controllers and a powerful graphics card produce a machine or plant controller that offers computing power for completely new ideas. Apart from the extremely high performance, up to 1024 GB DDR4 RAM, 5 or 6 free plugin card slots are also available for several camera interface cards for video evaluation.

All connections of the industrial server face upwards, so that the connecting cables can be taken directly to the wiring channel. The side walls are completely passive, and allow the industrial server to be fitted immediately next to other control cabinet devices.

The C6670 features two hard drive removable frames which, together with the on-board RAID controller, form a RAID 1 system with two mirrored hard disks or SSDs. This ensures high data security. Hard disks or SSDs which failed can easily be exchanged during operation.

The device can be equipped with a multi DVD drive. Card holders for the plug-in cards ensure resistance to impacts and vibrations. The C6670 offers convenient access to drives, memory and plug-in cards. The industrial server is supplied with a 100 to 240 V AC full range power supply unit.

A type plate is located on the top of the front cover, giving detailed information about the server configuration.





C6670 | Control cabinet industrial server

C6670	C6670-0000, -0010
Housing	6-slot SSI EEB industrial server for control cabinet installation
	all slots for full-size plug-in cards
	2 removable frames for hard disks
	drives and plug-in cards easily accessible
	all connectors on the top
	detailed PC configuration information on the front
	protection class IP 20
	operating temperature 045 °C
	weight of the basic configuration 16 kg (35.3 lbs)
	dimensions (W x H x D) 410 x 480 x 201 mm (16.1" x 18.9" x 7.9")

Features	C6670-0000	C6670-0010
Processor	2 x Intel [®] Xeon [®] with 6 or 12 cores per processor	2 x Intel® Xeon [®] with 8, 12, 16 or 20 cores per processor
Motherboard	SSI EEB	SSI EEB
Slots	6	6
Free slots	1 PCle x4 Gen2.x, 1 PCle x8 Gen3 and 3 PCle x16 Gen3	3 PCIe x8 and 3 PCIe x16
Max. card length	6 x fullsize	6 x fullsize
Memory	641024 GB DDR4 RAM ECC	641024 GB DDR4 RAM ECC
Graphic adapter	graphic card, 1 DVI-I and 1 DVI-D connector,	graphic card, 1 DVI-I and 1 DVI-D connector,
	occupies a PCIe x16 slot	occupies a PCIe x16 slot
Ethernet	2 on-board	2 on-board
Hard disks/flash	1–2 x 3½-inch HDD or 1–2 x 2½-inch HDD or SSD	1–2 x 3 ¹ / ₂ -inch HDD or 1–2 x 2 ¹ / ₂ -inch HDD or SSD
RAID 1	2 x 3½-inch HDD or 2 x 2½-inch HDD or SSD	2 x 3 ¹ / ₂ -inch HDD or 2 x 2 ¹ / ₂ -inch HDD or SSD
Possible disk drives	multi DVD	multi DVD
Power supply	100240 V AC	100240 V AC
Recommendation	available	recommended for new projects
Further information	for further options, technical drawings, documentations, etc.	see www.beckhoff.com/C6670

C69xx | Industrial PC series for control cabinet installation

www.beckhoff.com/C69xx

The compact aluminium housing of the C69xx Industrial PCs is equipped with a 3½-inch motherboard. All PC connections are on one side of the housing. The PC can optionally be equipped with mounting plates on two sides and fastened with screws in the control cabinet. Installation is possible at the rear panel or on the right-hand side panel.

The C69xx series PCs are supplied with a 24 V DC power supply unit, optionally with

integrated uninterruptible power supply (UPS). A battery pack can be connected externally and installed on a DIN rail close to the PC. Cooling fins behind the right-hand side panel enable fanless operation of the PC at temperatures up to 55 °C. The four types of Industrial PCs in the C69xx series differ in their processors and data storage devices.

Cooling of the C6915 with Intel[®] Atom[™] with up to four cores and the C6925 with

Intel[®] Celeron[®] ULV or Intel[®] Atom[™] with up to four cores requires no fan. The basic configuration of the C6915 and C6925 features a flash disk, thus creating PCs without moving parts. A hard disk or a second flash card can be integrated in all of the PCs from this series as an option.

The C6920 with Intel[®] Celeron[®] or Core[™] i3/i5/i7 of the latest generation has an easily exchangeable fan cartridge on the underside



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C6920 C6920 basic configuration with plug-in card slots



C6925

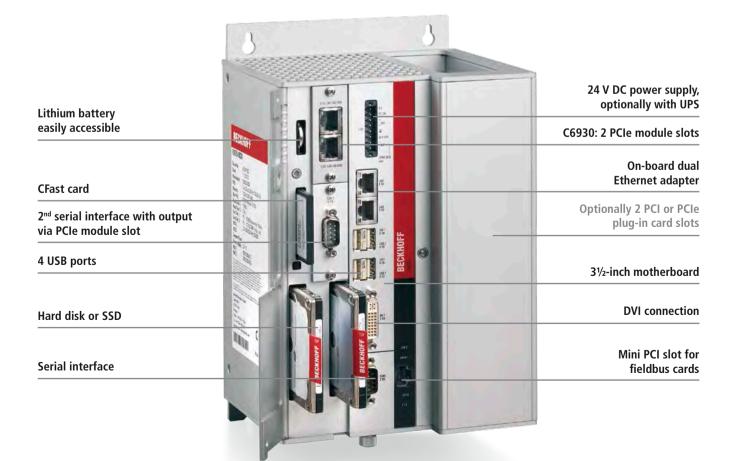




C6930 basic configuration

C6930 with plug-in card slots

of the housing. The C6930 Industrial PC is also offered with Intel[®] Celeron[®] or Core[™] i3/i5/i7 of the latest generation. It has a SATA RAID controller for mirroring two hard disks, SSDs or CFast cards. In the basic configuration, one of the two hard disk slots is equipped with a 2½-inch drive. A second hard disk is offered as an option. In addition, a CFast slot is accessible behind the front cover. Industrial PCs of this series and a Beckhoff Control Panel with DVI and USB connection make an ideal combination and offer a highperformance control platform for mechanical engineering applications, particularly in conjunction with the TwinCAT automation software under Windows 10 IoT Enterprise, up to the 6th generation of Core processor also under Windows 7 Professional, Windows 7 Ultimate, Windows Embedded Standard 7, with Intel[®] Atom[™] also under Windows Embedded Compact 7. Due to its two independent Ethernet interfaces, the C69xx is ideally suited as a compact central processing unit for an EtherCAT control system.





C6905 | "Economy" control cabinet Industrial PC

C6905	C6905-0010
Housing	fanless industrial PC for space-saving control cabinet installation
	mounting sheet at the rear wall
	all connectors on the front
	status LEDs
	passive cooling without fan
	5 cm (2") free space on top and bottom of the PC necessary for air circulation
	protection class IP 20
	operating temperature 055 °C
	weight of the basic configuration 0.9 kg (1.9 lbs)
	compact dimensions (W x H x D) 45 x 163 x 115 mm (1.8" x 6.4" x 4.5") without mounting plate

Features	C6905-0010
Processor	Intel [®] Atom™
Motherboard	3½-inch
Slots	-
Free slots	-
Max. card length	-
Memory	28 GB DDR3L RAM
Graphic adapter	integrated in the processor
Ethernet	2 on-board
Hard disks/flash	1 x 2 ¹ / ₂ -inch HDD or SSD or CFast
Power supply	24 V DC
Recommendation	recommended for new projects
Further information	for further options, technical drawings, documentations, etc. see www.beckhoff.com/C6905

Ordering information	Option
C9900-U214	internal, capacitive 1-second UPS



C6915 | Control cabinet Industrial PC

C6915	C6915-0010
Housing	fanless industrial PC for space-saving control cabinet installation
	mounting sheet at the rear wall
	all connectors on the front
	status LEDs
	lithium battery accessible behind the front flap
	1 slot for one Compact Flash card behind the front flap
	passive cooling without fan
	5 cm (2") free space on top and bottom of the PC necessary for air circulation
	protection class IP 20
	operating temperature 055 °C
	weight of the basic configuration 1.25 kg (2.8 lbs)
	compact dimensions (W x H x D) 48 x 164 x 119 mm (1.9" x 6.5" x 4.7") without mounting plate

Features	C6915-0010
Processor	Intel [®] Atom™
Motherboard	3½-inch
Slots	-
Free slots	-
Max. card length	-
Memory	28 GB DDR3L RAM
Graphic adapter	integrated in the processor
Ethernet	2 on-board
Hard disks/flash	21/2-inch HDD or SSD or 1 x CFast or 2 x CFast
Power supply	24 V DC
Recommendation	recommended for new projects
Further information	for further options, technical drawings, documentations, etc. see www.beckhoff.com/C6915



C6920 | Control cabinet Industrial PC

C6920	C6920-0050, -0060
Housing	Industrial PC for space-saving control cabinet installation
	mounting sheet at the rear wall
	all connectors on the front
	status LEDs
	lithium battery accessible behind the front flap
	1 slot for one 2½-inch hard disk or SSD behind the front flap
	1 slot for one CFast card behind the front flap
	fan cartridge with speed control and double ball bearing fans, accessible from the front
	5 cm (2") free space above and under the PC required for air circulation
	protection class IP 20
	operating temperature 055 °C
	weight of the basic configuration 1.9 kg (4.2 lbs)
	compact dimensions (W x H x D) 65 x 235 x 121 mm (2.6" x 9.3" x 4.8") without mounting plate

Features	C6920-0050	C6920-0060
Processor	Intel [®] Celeron [®] , Core™ i3/i5/i7 4 th Generation	Intel [®] Celeron [®] , Pentium [®] , Core [™] i3/i5/i7 6 th /7 th Generation
Motherboard	3½-inch	3½-inch
Slots	1 Mini PCI, optionally 2 plug-in card slots	-
Free slots	1 Mini PCI and optionally 2 PCI/PCIe plug-in card slots	-
Max. card length	Mini PCI, optionally 2 x 190 mm plug-in cards	-
Memory	216 GB DDR3L RAM	432 GB DDR4 RAM
Graphic adapter	integrated in the processor	integrated in the processor
Ethernet	2 on-board	2 on-board
Hard disks/flash	2 ¹ / ₂ -inch HDD or SSD and/or 1 x CFast or 2 x CFast	2 ¹ / ₂ -inch HDD or SSD and/or 1 x CFast or 2 x CFast
RAID 1	2 x CFast	2 x CFast
Power supply	24 V DC	24 V DC
Recommendation	available	recommended for new projects
Further information	for further options, technical drawings, documentations, etc. see www.beckhoff.com/C6920	



Extension for PCI and PCIe plug-in cards

The control cabinet PCs C6920 can be expanded by two slots for standard PC cards with a length of up to 190 mm. The 70 mm wider PC (see above) housing includes a backplane that provides a choice of two PCI slots, two PCI Express slots or one PCI and one PCI Express slot. The plug-in card connectors are located on the top side of the PC. The plug-in card slots are arranged on the right side of the PC. An aluminium cover on the front of the slot expansion enables easy installation of the plug-in cards without having to open the housing of the computer core. The slots are powered internally by the PC power supply.

Ordering information	Options for C6920
С9900-В506	2 PCIe plug-in card slots on the passive backplane integrated inside C6920, to plug-in PCIe x1 cards up to 190 mm (6.3")
	length. The connectors of the plug-in cards are located at the top side of the PC on the right. The width of the PC housing
	is increased by 70 mm (2.76"), the depth is increased by 18 mm (0.7").
С9900-В510	2 PCI plug-in card slots on the passive backplane integrated inside C6920, to plug-in PCI cards up to 190 mm (6.3")
	length. The connectors of the plug-in cards are located at the top side of the PC on the right. The width of the PC housing
	is increased by 70 mm (2.76"), the depth is increased by 18 mm (0.7").
C9900-B514	1 PCI and 1 PCIe plug-in card slot on a passive backplane integrated inside C6920, to plug-in one PCI and one PCIe x1
	card up to 190 mm (6.3") length. The connectors of the plug-in cards are located at the top side of the PC on the right.
	The width of the PC enclosure is increased by 70 mm (2.76"), the depth is increased by 18 mm (0.7").



C6925 | Fanless control cabinet Industrial PC

C6925	C6925-0020, -0030
Housing	fanless Industrial PC for space-saving control cabinet installation
	mounting sheet at the rear wall
	all connectors on the front
	status LEDs
	lithium battery accessible behind the front flap
	1 slot for one CFast flash card behind the front flap
	2 PCIe module slots to plug-in Beckhoff PCIe modules or to lead out interfaces of the motherboard ex factory
	passive cooling without fan with a heat sink
	5 cm (2") free space on top and bottom of the PC necessary for air circulation
	protection class IP 20
	operating temperature 055 °C
	weight of the basic configuration 1.75 kg (3.9 lbs)
	compact dimensions (W x H x D) 65 x 223 x 121 mm (2.6" x 8.8" x 4.8") without mounting plate

Features	C6925-0020	C6925-0030
Processor	Intel [®] Celeron [®] ULV	Intel [®] Atom™
Motherboard	3½-inch	3½-inch
Slots	2 PCIe modules	2 PCIe modules
Free slots	2 PCle	2 PCle
Max. card length	PCIe module	PCIe module
Memory	28 GB DDR3 RAM	28 GB DDR3L RAM
Graphic adapter	integrated in the processor	integrated in the processor
Ethernet	2 on-board	2 on-board
Hard disks/flash	21/2-inch HDD or SSD and/or 1 x CFast or 2 x CFast	2 ¹ / ₂ -inch HDD or SSD and/or 1 x CFast or 2 x CFast
RAID 1	2 x CFast	-
Power supply	24 V DC	24 V DC
Recommendation	not recommended for new projects	recommended for new projects
Further information	for further options, technical drawings, documentations, etc. see www.beckhoff.com/C6925	



C6930 | Control cabinet Industrial PC

C6930	C6930-0050, -0060
Housing	Industrial PC for space-saving control cabinet installation
	mounting sheet at the rear wall
	all connectors on the front
	status LEDs
	lithium battery accessible behind the front flap
	2 slots for 2 ¹ / ₂ -inch hard disks or SSDs behind the front flap
	1 slot for one CFast flash card behind the front flap
	2 PCIe module slots to plug-in Beckhoff PCIe modules or to lead out interfaces of the motherboard ex factory
	fan cartridge with speed control and double ball bearing fans, accessible from the front
	5 cm (2") free space above and under the PC required for air circulation
	protection class IP 20
	operating temperature 055 °C
	weight of the basic configuration 2.1 kg (4.6 lbs)
	compact dimensions (W x H x D) 90 x 235 x 121 mm (3.5" x 9.3" x 4.8") without mounting plate

Features	C6930-0050	C6930-0060
Processor	Intel [®] Celeron [®] , Core [™] i3/i5/i7 4 th Generation	Intel [®] Celeron [®] , Pentium [®] , Core [™] i3/i5/i7 6 th /7 th Generation
Motherboard	3½-inch	3½-inch
Slots	1 Mini PCI and 2 PCIe modules,	-
	optionally 2 plug-in card slots	
Free slots	1 Mini PCI and 2 PCIe modules,	-
	optionally 2 PCI/PCIe plug-in card slots	
Max. card length	Mini PCI and 2 PCIe modules,	-
	optionally 2 x 190 mm plug-in cards	
Memory	216 GB DDR3L RAM	432 GB DDR4 RAM
Graphic adapter	integrated in the processor	integrated in the processor
Ethernet	2 on-board	2 on-board
Hard disks/flash	1 or 2 x 2½-inch HDD or SSD and/or 1 x CFast or 2 x CFast	1 or 2 x 2 ¹ / ₂ -inch HDD or SSD and/or 1 x CFast or 2 x CFast
RAID 1	2 x 2 ¹ / ₂ -inch HDD or 2 x CFast	2 x 2½-inch HDD or 2 x CFast
Power supply	24 V DC	24 V DC
Recommendation	available	recommended for new projects
Further information	for further options, technical drawings, documentations, etc.	see www.beckhoff.com/C6930



Extension for PCI and PCIe plug-in cards

The control cabinet PCs C6930 can be expanded by two slots for standard PC cards with a length of up to 190 mm. The 70 mm wider PC housing (see above) includes a backplane that provides a choice of two PCI slots, two PCI Express slots or one PCI and one PCI Express slot. The plug-in card connectors are located on the top side of the PC. The plug-in card slots are arranged on the right side of the PC. An aluminium cover on the front of the slot expansion enables easy installation of the plug-in cards without having to open the housing of the computer core. The slots are powered internally by the PC power supply.

Ordering information	Options for C6930
С9900-В507	2 PCIe plug-in card slots on the passive backplane integrated inside C6930, to plug-in PCIe x1 cards up to
	190 mm (6.3") length. The connectors of the plug-in cards are located at the top side of the PC on the right.
	The width of the PC housing is increased by 70 mm (2.76"), the depth is increased by 18 mm (0.7").
C9900-B511	2 PCI plug-in card slots on the passive backplane integrated inside C6930, to plug-in PCI cards up to
	190 mm (6.3") length. The connectors of the plug-in cards are located at the top side of the PC on the right.
	The width of the PC housing is increased by 70 mm (2.76"), the depth is increased by 18 mm (0.7").
С9900-В515	1 PCI and 1 PCIe plug-in card slot on a passive backplane integrated inside C6930, to plug-in one PCI and
	one PCIe x1 card up to 190 mm (6.3") length. The connectors of the plug-in cards are located at the top side of the
	PC on the right. The width of the back cover is increased by 70 mm (2.76"), the depth is increased by 18 mm (0.7").

Industrial PC accessories

www.beckhoff.com/IPC-accessories





CU8800, CU8850, C9900-E270 | USB Extended, the USB 1.1 extension

The USB specification allows a distance of 5 m between the PC and the USB devices. A further 5 m of cable can be added by using a USB hub. In the construction of machines and plants, larger distances must be bridged without having to insert a USB hub every 5 m. The CU8800 USB Extender sends the USB signal via a Cat.5 cable that can be up to 50 m long to the CU8850 USB Extended receiver or the CP69xx or CP79xx Control Panels, which convert the signal back to USB. The USB Extender boxes are designed for DIN rail mounting. The CU8800 transmitter is supplied with power by the PC via USB. The CU8850 receiver has an integrated 24 V DC power supply unit. Data rates of up to 12 Mbit/s can be transmitted.

Technical data	CU8800 USB Extender Tx	CU8850 USB Extender Rx
	USB Extended transmitter box	USB Extended receiver box
	1 USB input with USB B socket to be connected	1 USB Extended input with RJ45 socket for up
	to the PC in maximum 1 m distance	to 50 m Cat.5 cable
	1 USB Extended output with RJ45 socket for up	1 USB output with USB A socket to be connected to
	to 50 m Cat.5 cable	a USB device in maximum 5 m distance
	-	quick error analysing with diagnostic LEDs
	plastic housing for DIN rail installation	plastic housing for DIN rail installation
	USB transfer rate up to 12 Mbit/s for USB 1.1, downwards con	mpatible to USB 1.0
	IP 20	IP 20
	0+55 °C	0+55 °C
	34 mm x 98 mm x 77 mm	34 mm x 98 mm x 77 mm
	power supply via USB	24 V DC power supply

Technical data	C9900-E270 USB Extender Tx PCIe module
USB Extended transmitter module	
	1 USB Extended output with RJ45 socket for up to 50 m Cat.5 cable for connecting a Control Panel with
	DVI/USB Extended interface CP69xx or CP79xx
	for ex factory mounting in PCs with Beckhoff PCIe module slot
	USB transfer rate up to 12 Mbit/s according to USB 1.1



CU8801, CU8851, C9900-E271 | USB Extended 2.0, the USB 2.0 extension

The USB specification allows a distance of 5 m between the PC and the USB devices. A further 5 m of cable can be added by using a USB hub. In the construction of machines and plants, larger distances must be bridged without having to insert a USB hub every 5 m. The CU8801 USB Extender sends the 2.0 USB signal via a Cat.5 cable that can be up to 50 m long to the CU8851 USB Extended receiver, which converts the signal back to USB. Data rates of up to 480 Mbit/s can be transmitted. Both USB Extender boxes are designed for DIN rail mounting. The CU8801 transmitter is powered by the PC. The CU8851 receiver has an integrated 24 V DC power supply unit. The USB Extended 2.0 receiver is already integrated into the Control Panels from the CP29xx and CP39xx series.

Technical data	CU8801 USB Extender 2.0 Tx	CU8851 USB Extender 2.0 Rx
	USB Extended 2.0 transmitter box	USB Extended 2.0 receiver box
	1 USB input with USB B socket to be connected to	1 USB Extended 2.0 input with RJ45 socket
	the PC in maximum 1 m distance	for up to 50 m Cat.5 cable
	1 USB Extended 2.0 output with RJ45 socket	1 USB output with USB A socket to be connected to
	for up to 50 m Cat.5 cable	a USB device in maximum 5 m distance
	-	quick error analysing with diagnostic LEDs
	plastic housing for DIN rail installation	plastic housing for DIN rail installation
	USB transfer rate up to 480 Mbit/s for USB 2.0	USB transfer rate up to 480 Mbit/s for USB 2.0
	IP 20	IP 20
	0+55 °C	0+55 °C
	34 mm x 98 mm x 77 mm	34 mm x 98 mm x 77 mm
	power supply via USB	24 V DC power supply

Technical data	C9900-E271 USB Extender 2.0 Tx PCIe module
USB Extended 2.0 transmitter module	
	1 USB Extended 2.0 output with RJ45 socket for up to 50 m Cat.5 cable for connecting a Control Panel with
	DVI/USB Extended 2.0 interface CP29xx-0000 or CP39xx-0000
	for ex factory mounting in PCs with Beckhoff PCIe module slot
	USB transfer rate up to 480 Mbit/s according to USB 2.0



CU8802, CU8803, C9900-E276 | CP-Link 4 transmitter modules

With CP-Link 4, operating panels can be located up to 100 m away from the Industrial PC. The one cable solution can be used to transfer video signals, USB 2.0 and the power supply in a Cat. 6_A cable, thus reducing cable and installation costs. A further benefit is the use of purely passive displays. The CP-Link 4 technology is supported by the new Beckhoff multi-touch panel series CP29xx-0010 (builtin version) and CP39xx-0010 (mounting arm version).

CP-Link 4 – The Two Cable Display Link

The CP29xx-0010 multi-touch built-in panels and the CP39xx-0010 multi-touch panels for mounting arm installation can be operated up to 100 m away from the PC. CP-Link 4 – The Two Cable Display Link – transfers DVI and USB together via a Cat. 6_A cable. The CU8802 CP-Link 4 transmitter box is connected to the PC via DVI and USB, or else the C9900-E276 PCIe module for CP-Link 4 is installed in the PC.

CP-Link 4 – The One Cable Display Link

The power supply for the Control Panel can also be provided via CP-Link 4 – The One Cable Display Link. The CU8803 CP-Link 4 transmitter box is used instead of the CU8802 or the PCIe module. The Control Panel remains unchanged. The CU8803 transmitter box provides power to the Control Panel via the Cat. 6_A cable, which also transfers DVI and USB. The power supply socket of the panel is not used.

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Technical data	CU8802 Transmitter box for CP-Link 4 –	CU8803 Transmitter box for CP-Link 4 –
	The Two Cable Display Link	The One Cable Display Link
	CP-Link 4 Extender Tx for connecting a Control Panel with	CP-Link 4 Extender Tx for connecting a Control Panel with
	CP-Link 4 interface CP29xx-0010 or CP39xx-0010	CP-Link 4 interface CP29xx-0010 or CP39xx-0010
	1 USB input with USB B socket to be connected to the PC	1 USB input with USB B socket to be connected to the PC
	in maximum 1 m distance	in maximum 1 m distance
	1 DVI input with DVI-D socket to be connected to the PC	1 DVI input with DVI-D socket to be connected to the PC
	in maximum 1 m distance	in maximum 1 m distance
	1 CP-Link 4 output with RJ45 socket for up to 100 m	1 CP-Link 4 output with RJ45 socket for up to 100 m
	Cat.6 _A cable for connecting a Control Panel with CP-Link 4	Cat.6A cable for connecting a Control Panel with CP-Link 4
	interface CP29xx-0010 or CP39xx-0010	interface CP29xx-0010 or CP39xx-0010
	power supply for the Control Panel with connection	power supply of the Control Panel with CU8803 via the
	of 24 V at the Control Panel	Cat.6 _A cable
	metal housing for DIN rail installation	metal housing for DIN rail installation
	CP-Link 4 transfers USB 2.0 with 100 Mbit/s and DVI.	CP-Link 4 transfers USB 2.0 with 100 Mbit/s and DVI.
	24 V input for power supply of the CU8802 transmitter box	24 V input for power supply of the CU8803 transmitter box
		and the Control Panel
	IP 20	IP 20
	0+55 °C	0+55 °C
	45 mm x 100 mm x 80 mm	70 mm x 100 mm x 80 mm
	1 m USB connecting cable	1 m USB connecting cable
	1 m DVI connecting cable	1 m DVI connecting cable

Technical data	C9900-E276 PCIe module for CP-Link 4 – The Two Cable Display Link	
	CP-Link 4 Extender Tx PCIe module	
	CP-Link 4 transmitter module for ex factory installation in PCs with Beckhoff PCIe module slots	
	1 CP-Link 4 output with RJ45 socket for up to 100 m Cat.6A cable for connecting a Control Panel with CP-Link 4	
	interface CP29xx-0010 or CP39xx-0010	
	CP-Link 4 transfers USB 2.0 with 100 Mbit/s and DVI.	
	power supply for the Control Panel with connection of 24 V at the Control Panel	

▶ www.beckhoff.com/CP-Link4

C9900-H3xx | USB sticks

USB sticks are used for data exchange between PCs or for data backup. For data backup operating system and application programs of a PC are saved as an image on a USB stick once the PC has been configured. In the event of a data loss on the PC the data can be restored from the USB stick.

As a data backup device the USB stick must be able to store the data reliably and for many years. In contrast to USB sticks with MLC or TLC flash memory, the high-quality SLC flash memory in the Beckhoff USB stick ensures long-term data integrity.



Ordering information	USB sticks
С9900-Н356	4 GB USB stick, USB 3.0
С9900-Н359	8 GB USB stick, USB 3.0
С9900-Н376	16 GB USB stick, USB 3.0
С9900-Н390	32 GB USB stick, USB 3.0

Ordering information	USB sticks with Beckhoff Service Tool (BST) and Acronis™ Backup & Recovery
С9900-Н371	4 GB USB stick, USB 3.0, with Beckhoff Service Tool (BST) and Acronis™ Backup, English,
	for PCs with at least 2 GB RAM and with USB 2.0 or higher
С9900-Н372	8 GB USB stick, USB 3.0, with Beckhoff Service Tool (BST) and Acronis™ Backup, English,
	for PCs with at least 2 GB RAM and with USB 2.0 or higher
С9900-Н377	16 GB USB stick, USB 3.0, with Beckhoff Service Tool (BST) and Acronis™ Backup, English,
	for PCs with at least 2 GB RAM and with USB 2.0 or higher
С9900-Н391	32 GB USB stick, USB 3.0, with Beckhoff Service Tool (BST) and Acronis™ Backup, English,
	for PCs with at least 2 GB RAM and with USB 2.0 or higher

CU8006 | 4-port USB 3.0 hub

The CU8006 DIN rail-mount USB hub has four ports and supports the USB 3.0 data transfer rate of up to 5 Gbit/s, but is also compatible with slower USB standards. USB 3.0 devices can be connected at a distance of up to 3 m. Connection to USB 2.0 devices is possible with 5-m cables. An 1-m USB cable is provided for connecting the USB hub with the PC. 3-m USB 3.0 cables are permitted between PC and CU8006.



Technical data	CU8006 4-port USB 3.0 hub
	1 USB 3.0 input with USB B socket
	4 USB 3.0 outputs with USB A socket
	delivers up to 1 A supply current at each USB port
	USB transfer rate up to 5 Gbit/s, compatible to all USB standards
	plastic housing for DIN rail installation
	IP 20
	0+55 °C
	34 mm x 98 mm x 77 mm
	24 V DC power supply
	1 m USB connecting cable

CU8810 | DVI splitter with USB extender for CP69xx and CP79xx

A common application in machine and plant construction is the simultaneous display of a PC screen on several monitors. Up to four CP69xx or CP79xx DVI/USB Control Panels can be connected to a PC via the CU8810 DVI splitter. Thanks to DVI/USB extension technology, the Control Panels can each be connected at distances of 50 m from the DVI splitter. PCs with two DVI outputs, which are configured as extended desktops, generate two different screen contents. Both DVI outputs can be fed into the DVI splitter. Using DIP switches, the four DVI outputs can each be assigned to one of the two DVI inputs, so that the Control Panels show either the left or the right half of the desktop, as selected.



Technical data	CU8810 DVI splitter for CP69xx and CP79xx
	metal housing for DIN rail installation
	compact industrial design
	2 DVI-D inputs
	4 DVI-D outputs
	assignment of the 4 DVI outputs to the 2 inputs freely configurable via DIP switches
	DVI inputs and outputs with full DVI data range up to 1.65 Gbit/s
	unused DVI input and outputs can be switched off to save energy
	1 USB input with USB B socket
	4-port USB hub with 4 USB Extended outputs as RJ45 connectors
	USB transfer rate up to 12 Mbit/s for USB 1.1, downwards compatible to USB 1.0
	IP 20
	0+55 ℃
	146.5 mm x 100 mm x 38 mm
	24 V DC power supply

CU8815 | DVI splitter

A common application in machine and plant construction is the simultaneous display of a PC screen on several monitors. Up to four CP29xx, CP39xx, CP68xx, CP69xx, CP79xx or CP79xx DVI/USB Control Panels can be connected to a PC via the CU8815 DVI splitter. PCs with two DVI outputs, which are configured as extended desktops, generate two different screen contents. Both DVI outputs can be fed into the DVI splitter. Using DIP switches, the four DVI outputs can each be assigned to one of the two DVI inputs, so that the Control Panels show either the left or the right half of the desktop, as selected.



Technical data	CU8815 DVI splitter without USB extender
	metal housing for DIN rail installation
	compact industrial design
	2 DVI-D inputs
	4 DVI-D outputs
	assignment of the 4 DVI outputs to the 2 inputs freely configurable via DIP switches
	DVI inputs and outputs with full DVI data range up to 1.65 Gbit/s
	unused DVI input and outputs can be switched off to save energy
	IP 20
	0+55 °C
	146.5 mm x 100 mm x 38 mm
	24 V DC power supply

CU8871 | USB CFast slot

The CU8871 offers a CFast socket with USB connector in a compact housing for DIN rail mounting. CFast cards are used in the industrial environment as data memory for process and control data. The CFast cards are hot-plug capable in the CU8871 and can hence be plugged and unplugged like removable data storage devices for exchanging data with other PCs during operation. The USB 3.0 connection offers the highest data transfer rate possible with a CFast card, but the CFast adapter can also be connected to PCs with a USB 2.0 interface. Power is also supplied via USB. Status LEDs indicate whether the CU8871 is connected, signal data accesses and provide information as to whether a CFast card is inserted.



Technical data	CU8871 USB CFast slot
	CFast slot
	front LED indicators for PWR (power), LOCK (only read permission) and CFast (access)
	1 USB 3.0 input with USB B socket
	compatible to all USB standards
	plastic housing for DIN rail installation
	IP 20
	0+55 °C
	34 mm x 98 mm x 77 mm
	power supply via USB
	1 m USB connecting cable

CU8880 | Ethernet controller with USB input

With the CU8880 USB-to-LAN adapter, Industrial PCs can be extended with an additional industrially-suited and independent Ethernet interface. The CU8880 is used for necessary IT communication. It is not suitable for EtherCAT or real-time Ethernet communication. However, the on-board Ethernet interfaces of the respective Industrial PCs are available for this.



Technical data	CU8880 Ethernet controller with USB input
	Ethernet controller box
	1 USB 2.0 input with USB B socket
	1 Ethernet interface with 1 x 10/100BASE-T connector RJ45
	not suitable for real-time Ethernet or EtherCAT
	plastic housing for DIN rail installation
	1 m USB connecting cable
	IP 20
	0+55 °C
	34 mm x 98 mm x 77 mm
	power supply via USB

FC9071 | Gigabit Ethernet PC interface card

The FC9071 Ethernet PCIe network card can be used in office and automation networks. It is installed in the PC's connecting area and is wired to the 3½-inch motherboard by a flexible PCIe cable. Compared to the Mini PCI bus, the PCIe bus offers a faster transfer rate and a better long time availability. The Mini PCI slot, if still present, remains free for the use of NOVRAM cards. The FC9071 can also be operated with TwinCAT drivers – and therefore in real-time.

Constitution of the second second 10/100/1000 Militia 1 shares a DC interface	Ordering information	
Gigabit Ethernet PC Interface Card, 10/100/1000 Mibit/s, 1-channel, PCIe Interface	FC9071-0000	Gigabit Ethernet PC interface card, 10/100/1000 Mbit/s, 1-channel, PCIe interface

FC9062 | PCIe module

The compact PC expansion card with industrial form factor

Beckhoff PCIe modules are highly integrated PCI Express plug-in cards and follow the trend towards ever smaller PCs. The function of PC plug-in cards is integrated in a compact format that is suitable for harsh industrial environments.

Compared with PCI or PCIe plug-in cards, which require a special card holder in the Industrial PC, the Beckhoff PCIe module is a industrially compatible plug-in card that is firmly screwed to the inside of the PC via the plug connector bracket. The PCIe modules can be retrofitted on site without special PC knowledge. The PC housing does not have to be opened.

The 3¹/₂-inch motherboard offers four PCI Express lanes to be distributed to the PCIe module slots or standard plug-in card slots. The result are PCs with module slots and/ or slots for plug-in cards. A PCIe module is connected to the motherboard via one PCI Express lane with a data transfer rate of 5 Gigabit. A module can therefore provide two Gigabit Ethernet interfaces, for example.



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Ordering information FC9062



FC3161 | PCIe modules with PROFIBUS master and/or NOVRAM

Beckhoff PCIe modules are highly integrated PCI Express plug-in cards and follow the trend towards ever smaller PCs. The function of PC plug-in cards is integrated in a compact format that is suitable for harsh industrial environments.

The PCIe modules for Beckhoff Industrial PCs allow the use of a PROFIBUS master

without NOVRAM (FC3161-0000) or with 512 kB NOVRAM for easy data backup (FC3161-0002).

In TwinCAT, PROFIBUS and NOVRAM are available. Other applications also benefit from the diverse features: general PROFIBUS drivers for different Windows versions and convenient configuration tools are included in the TwinCAT I/O software package. High-level language programs use the DLL, Visual Basic applications the ActiveX interface. Applications with OPC interface can access process data and parameters via an OPC server.

Technical data	FC3161-0000	FC3161-0002
Fieldbus	PROFIBUS DP (standard), PROFIBUS DP-V1	PROFIBUS DP (standard), PROFIBUS DP-V1
Number of fieldbus channels	1	1
Data transfer rates	9.6 kbaud12 Mbaud	9.6 kbaud12 Mbaud
Interface to the PC	PCIe (PCI Express)	PCIe (PCI Express)
Bus interface	1 x D-sub socket, 9-pin, galvanically decoupled	1 x D-sub socket, 9-pin, galvanically decoupled
Communication	master and slave functionality	master and slave functionality
Bus device	max. 125 slaves with up to 244 bytes input, output, parameter, configuration or diagnostic data per slave	
Hardware diagnosis	2 LEDs per channel	2 LEDs per channel
NOVRAM	-	512 kB
Driver	TwinCAT 2.11 R3 and higher	TwinCAT 2.11 R3 and higher

Ordering information	PCI Express module
C9900-R266	memory PCIe module for PCs with Beckhoff PCIe module slots, NOVRAM for fail-safe storage of process data,
	512 kB, PCI Express x1 bus

C9900-E277 | USB 3.0 PCIe module

The C9900-E277 PCIe module for USB 3.0 has two ports and supports the USB 3.0 data transfer rate of up to 5 Gbit/s, but is also compatible with slower USB standards. PCIe modules can be used in 3½-inch motherboard Beckhoff PCs with a PCIe module slot. The C9900-E277 USB module can also be plugged in later. USB 3.0 devices can be connected at a distance of up to 3 m. Connection to USB 2.0 devices is possible with 5-m cables.

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Technical data	C9900-E277 USB 3.0 PCIe module
	2-port USB 3.0 interfaces
	delivers up to 1 A supply current at each USB port
	USB transfer rate up to 5 Gbit/s for USB 3.0
	compatible to all USB standards

C9900-E301 | RS232 PCIe module

PCIe modules from Beckhoff are highly integrated PCI Express plug-in cards that respond to the current trend towards increasingly smaller IPC devices.

The C9900-E301 PCIe module can be used to complement Industrial PCs with Beckhoff PCIe module slot by two serial RS232 interfaces. Due to the small dimensions of the module, two Harting ix Type B connectors are integrated into the front plate of the PCIe modules instead of the D-sub connectors commonly used with RS232. For adaptation to 9-pin D-sub connectors, the C9900-K920 adapter cable is available.



Technical data	C9900-E301 RS232 PCIe module
	2 serial interfaces RS232
	transfer rate up to 921,600 bps
	2 sockets Harting ix Type B
	requires 2 adapter cables C9900-K920 Harting ix Type B to D-sub 9-pin

Ordering information	
С9900-К920	adapter cable Harting ix Type B to D-sub 9-pin for C9900-E301 RS232 PCIe module, length 45 cm



C9900-E2xx | Slotbox for extending Industrial PCs with two plug-in card slots

The slotbox makes PCI Express and PCI slots available outside the IPC as well. The PCI Express bus is fed via a plug connector and cable to a slotbox located up to 7 m (23-ft) away. Users can use the installation space in the control cabinet flexibly and locate further plug-in cards locally. Both PCI and PCI Express card slots are available by using different versions of the slotbox. The slotbox is made of sturdy aluminium and ideal for use in industrial environments.



PCIe module C9900-E239 for installation in the PC

C9900-E2xx	С9900-Е249	C9900-E250	С9900-Е251	
Technical data	fanless aluminium housing for cont	rol cabinet installation		
	2 slots for up to 190 mm long plug	-in cards		
	all connectors on the top	all connectors on the top	all connectors on the top	
	PCIe x1 input for connection with a	PCIe x1 input for connection with an Industrial PC with PCIe module C9900-E236 or -E239		
	max. 7 m distance between Industr	ial PC and slotbox		
	1 PCI and 1 PCIe x1 slot	2 PCIe x1 slots	2 PCI slots	
	IP 20	IP 20	IP 20	
	0+55 °C	0+55 °C	0+55 °C	
	1.7 kg without plug-in cards	1.7 kg without plug-in cards	1.7 kg without plug-in cards	
	94 mm x 222 mm x 132 mm witho	94 mm x 222 mm x 132 mm without mounting plate		
	24 V DC power supply	24 V DC power supply	24 V DC power supply	
C9900-E23x	PCIe modules			
С9900-Е236	PCIe modules with external PCIe x	connector for CP22xx, CP62xx, C5210 or	C65xx with PCIe module slot	
С9900-Е239	PCIe modules with external PCIe x	connector for C6930		
C9900-K50x	Connecting cables for the slotb	ох		
С9900-К501	connecting cable PCIe x1 external,	1 m		
С9900-К502	connecting cable PCIe x1 external,	3 m		
С9900-К503	connecting cable PCIe x1 external,	5 m		
С9900-К504	connecting cable PCIe x1 external,	7 m		

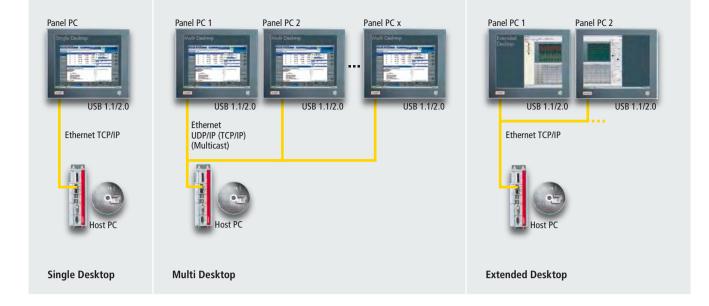


C9900-U33x | Battery pack

All Industrial PCs can be equipped with a 24 V power supply unit and an integrated UPS. The UPS supplies the PC with power if the mains power fails. This allows data to be saved on the hard disk or Flash, after which the PC can be shut down properly. A battery pack, which serves as the energy storage device, is mounted on a DIN rail outside the PC.

Rated at 3.4 Ah, the maintenance-free C9900-U330 24 V battery pack offers a very high nominal capacity in a compact package. With its rated capacity of 1.3 Ah, the very compact 24 V C9900-U332 battery pack is designed for PCs with Intel[®] Atom[™] processor.

Technical data	C9900-U330	C9900-U332
	battery pack for PCs with 24 V power supply with intergrated	UPS
	metal housing for mounting on norm rail TS35x15 2.3	metal housing for mounting on norm rail TS35x15 2.3
	24 V nominal voltage	24 V nominal voltage
	3.4 Ah nominal capacity (20 h discharge)	1.3 Ah nominal capacity (20 h discharge)
	two 12 V batteries in series connection	two 12 V batteries in series connection
	VRLA AGM Technology = valve regulated lead acid batteries v	with glass fiber mat inside the separator
	(VRLA = valve regulated lead acid, AGM = absorbed glass ma	at technology)
	maintenance-free	maintenance-free
	9 A fuse by PTC element	9 A fuse by PTC element
	operating temperature 050 °C	operating temperature 050 °C
	weight 3.3 kg (7.3 lbs)	weight 2.1 kg (4.63 lbs)
	dimensions (W x H x D)	dimensions (W x H x D)
	157 x 70 x 175 mm (6.2" x 2.8" x 6.9")	68.7 x 106.6 x 143.8 mm (4.2" x 2.8" x 5.66")



CP-Link 3 | Ethernet- and IP protocol-based desktop transfer software

CP-Link 3 transfers the desktop of a PC via Ethernet to several Panel PCs and the operator mouse and keyboard entries to the host PC. The screen contents are captured by a virtual graphic adapter in the host PC and sent using Ethernet to one or more Panel PCs with Windows operating systems (CE, XP, Windows 7 or Windows Embedded Standard). Networking can be done using cost-effective standard Ethernet cables (Cat.5) which are suitable for drag chains.

Since the data and image transfer are based on TCP/IP, the operating and display functions can be extended using the Internet. Panel PCs can be integrated using the Internet via VPN (Virtual Private Network). A VPN service must be available for the Internet security functions.

Keyboard entries, touch screen and special key functions are transferred from the client to the host PC via Virtual USB. USB devices connected to a Panel PC appear in the host PC like locally plugged-in devices and can be used in the normal way.

Virtual USB emulates a USB root hub in the host PC. If a USB device is plugged into a Panel PC, then the virtual hub logs the device on to the operating system of the host PC and transparently transmits the ensuing communication. For the operating system, the USB device behaves as though it was directly connected to the PC. Virtual USB transfers the standards USB 1.1 and USB 2.0. As communication takes place using 100 Mbit/s Ethernet, the USB 2.0 transmission performance (480 Mbit/s) is restricted.

Additional input/output devices on the Panel PCs, such as rotary switches, buttons, etc., are read in by the host PC using an additional communication channel. Printers and webcams, which are connected to a Panel PC by means of USB, can be used from the host PC.

The scope of delivery for CP-Link 3 includes host and client software. The host PC may have Windows XP, Windows 7 or Windows Embedded Standard installed. Panel PCs with Windows CE, Windows XP, Windows 7 or Windows Embedded Standard are used as clients. As the application software (PLC/NC, HMI, etc.), once started, runs on the host PC, any necessary software licenses are only payable once for the host PC. The client Panel PCs only receive image data. Apart from the operating system and CP-Link 3, no other software license is required for the clients. Even for PCs with more than one graphics card only one license per application software is necessary. For host PCs of other vendors an upgrade license is required.

The CP-Link 3 software is available in three versions:

- Single Desktop
- Multi Desktop
- Extended Desktop

License upgrades are available for third-party host PCs.

www.beckhoff.com/CP-Link3

Single Desktop

A Panel PC is connected with a host PC via Ethernet and shows the image of the host PC. Communication takes place using TCP/IP.

Keyboard entries, touch screen and special key functions are transferred from the client to the host PC via Virtual USB. USB devices connected to a Panel PC appear in the host PC just like locally connected devices.

Ordering	CP-Link 3 Single Desktop	
information		
	Ethernet and IP protocol-based desktop transfer software CP-Link 3	
	transfers the desktop of a PC via Ethernet to one Panel PC	
	transmission of mouse and keyboard inputs of the client user to the host PC	
	connection by Ethernet or Internet, TCP/IP	
	1 virtual graphic adapter	
	Virtual USB	
	USB devices connected at the client are found by the host PC like a local USB device.	
	1 client controllable	
	The client shows the screen of the host PC.	
	host software for PCs with Windows XP, Windows 7 or	
	Windows Embedded Standard	
	client software for Beckhoff Panel PCs with Windows CE, Windows XP,	
	Windows 7 or Windows Embedded Standard	

Multi Desktop

Several Panel PCs are connected with a PC via Ethernet and display the image of the host PC. All connected client Panel PCs show the same image.

Communication takes place using TCP/IP (up to 10 Panel PCs) or via UDP Multicast (up to 255 Panel PCs). The benefit of Multicast lies in the fact that messages can be transferred to several Panel PCs simultaneously without the transmitter bandwidth multiplying by the number of receivers.

Ordering	CP-Link 3 Multi Desktop
information	
	Ethernet and IP protocol-based desktop transfer software CP-Link 3
	transfers the desktop of a PC via Ethernet to Panel PCs
	transmission of mouse and keyboard inputs of client users to the host PC
	connection by Ethernet or Internet, TCP/IP or UDP/IP (Multicast)
	1 virtual graphic adapter
	Virtual USB
	USB devices connected at a client are found by the host PC like a local USB device.
	Up to 255 clients are controllable in UDP/IP mode, up to 10 clients in TCP/IP mode.
	All clients show the same picture, the screen of the host PC.
	The input devices can be locked at any client by TwinCAT PLC or via application
	programming interface (API).
	host software for PCs with Windows XP, Windows 7 or
	Windows Embedded Standard
	client software for Beckhoff Panel PCs with Windows CE, Windows XP,
	Windows 7 or Windows Embedded Standard

Extended Desktop

One or several virtual graphic adapters are used to extend the host PC desktop. The program windows of the application software can be moved to additional monitors covered by the extended desktop. Applications may be started on a specific monitor. The desktop can be extended to up to 9 monitors. CP-Link 3 can transfer the data via Ethernet to several client Panel PCs.

The mouse and keyboard entries of individual clients can be locked via TwinCAT PLC or a software interface (API), in order to prevent interference between several users.

Ordering information	CP-Link 3 Extended Desktop
	Ethernet and IP protocol-based desktop transfer software CP-Link 3
	transfers up to 9 screens of the extended desktop of a PC via Ethernet to Panel PCs
	transmission of mouse and keyboard inputs of client users to the host PC
	connection via Ethernet or Internet, TCP/IP or UDP/IP (Multicast)
	Up to 9 virtual graphic adapters extend the desktop of the host PC.
	Virtual USB
	USB devices connected at a client are found by the host PC like a local USB device.
	Up to 255 clients are controllable in UDP/IP mode, up to 10 clients in TCP/IP mode.
	Each client shows 1 of maximally 9 screens of the extended desktop of the host PC
	The input devices can be locked at any client by TwinCAT PLC or via application programming interface (API).
	Applications are allocable to one of the additional screens of the extended
	desktop.
	host software for PCs with Windows XP, Windows 7 or
	Windows Embedded Standard
	client software for Beckhoff Panel PCs with Windows CE, Windows XP,
	Windows 7 or Windows Embedded Standard

Control Panels

www.beckhoff.com/ControlPanel



Multi-touch Control Panels

- built-in or mounting arm devices
- also for use in hazardous areas, Zone 2/22
- multi-finger touch screen
- 7-, 12-, 12.1-, 15-, 15.6-, 18.5-, 19-,
 21.5- and 24-inch displays
- vertical or horizontal orientation (portrait/landscape)
- DVI/USB Extended interface
- CP-Link 4 The One Cable Display Link

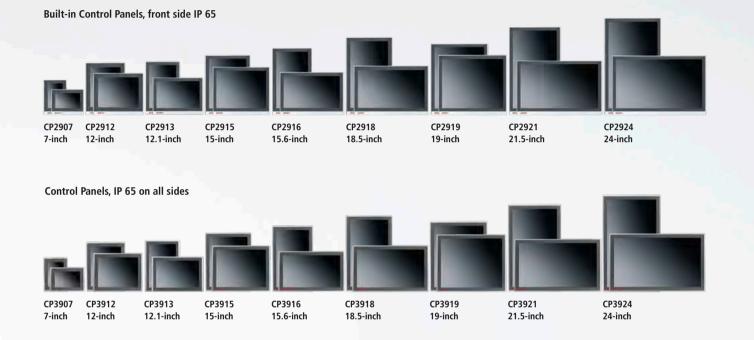
See page 144

Single-touch Control Panels

- built-in or mounting arm devices
- without touch screen, with singlefinger touch screen or touch pad
- 5.7-, 6.5-, 7-, 10.1-, 12-, 15and 19-inch displays
- DVI/USB Extended interface

See page 160





Built-in Control Panels, front side IP 65





CP6907 CP6919 5.7-inch 6.5-inch CP6911 12-inch

CP7911

12-inch



CP6922 15-inch



CP6933 19-inch





CP7909 6.5-inch



CP7922 15-inch



CP7933 19-inch



CP790x-14xx 12-, 15-, 19-inch

Multi-touch Control Panels CP29xx and CP39xx

www.beckhoff.com/multi-touch

With Windows 10 the multi-finger touch screens are becoming increasingly popular for use with PCs. Industrial applications are using the projected capacitive multi-touch technology. An anti-reflective glass plate forms the display front. The operation with gloves is possible. Ten fingers are detected separately.

The CP29xx built-in Panel series for control cabinet installation is implemented with IP 65 protection at the front and IP 20 at the rear. The CP39xx Control Panels for mounting arm installation feature all-round IP 65 protection. The panels CP29xx-0000 and CP39xx-0000 with DVI/USB Extended interface can be operated up to 50 m away from the Industrial PC. With CP-Link 4 – The One Cable Display Link – and CP29xx-0010 and CP39xx-0010 Control Panels the distance between Industrial PC and operating panel can be increased to 100 m.

Beckhoff offers the following display sizes:

Wide screen (16:9)

- 7-inch, resolution 800 x 480
- 12.1-inch, resolution 1280 x 800

- 15.6-inch, resolution 1366 x 768
- 18.5-inch, resolution 1366 x 768
- 21.5-inch, full HD resolution 1920 x 1080

24-inch, full HD resolution 1920 x 1080
 Further display sizes

- 12-inch, resolution 800 x 600 (4:3)
- 15-inch, resolution 1024 x 768 (4:3)

19-inch, resolution 1280 x 1024 (5:4)
 With the option C9900-M575 all of the displays are also available in portrait format.

Customer-specific adaptations for pushbutton extension individualise the multitouch Control Panel series.





CP29xx



CPX29xx and CPX39xx for application

in hazardous areas, Zone 2/22 With the CPX Control Panel series, the proven multi-touch technology of Beckhoff Control Panels is available in particularly robust versions, complying with the requirements for use in hazardous areas classified Zone 2/22. The high level of functionality and excellent build quality ensure the reliability of CPX Control Panels even under harsh environmental conditions. The capacitive touch technology provides the typical convenient operation of all Beckhoff multitouch panels. The aesthetically pleasing appearance of the panel and the look and feel of the aluminium housing are maintained, making them visual highlights in explosion-proof environments. The devices are available with three different displays in the sizes 15, 19 and 21.5 inches.



CPX29xx



DVI/USB Extended 2.0

With the DVI/USB Extended technology, Control Panel and Industrial PC can be operated at distances of up to 50 m. The DVI graphics signal from the PC is directly transmitted via a DVI-E cable. The Control Panel is equipped with a signal processor, which restores the DVI signal after 50 m.

For the connection of CP29xx-0000 and CP39xx-0000 Control Panels, the CU8801 USB Extender box is connected to a USB port of the PC. The CU8800 converts the USB signal coming from the PC to USB Extended 2.0 (USB-E 2.0) and transmits it via up to 50 m of Cat.5 cable to the Control Panel, where it is reconverted to USB 2.0 with data rates of 480 Mbit/s.

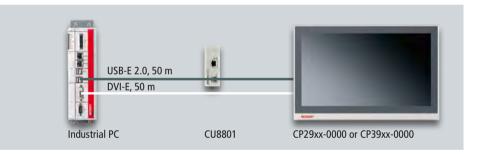
A USB hub in the Control Panel enables the connection of external USB devices such as a keyboard or USB stick in addition to touch screen and push-button extension. It is not possible, however, to connect an additional USB hub to the Control Panel.

The CU8801 USB Extender box does not require auxiliary power supply. It has a USB

input and an RJ45 USB Extended output. The box is available in a set with all required cables in various lengths to bridge distances of up to 50 m between PC and Control Panel.

For smaller distances of up to 5 m, CP29xx-0000 Control Panels and PC can be directly connected via USB cable, whereas the CP39xx-0000 Control Panels have to be connected by means of the CU8801 USB Extender no matter what distance.

DVI/USB Extended 2.0 for CP29xx-0000 or CP39xx-0000 via the CU8801 transmitter box



CP-Link 4 | The One Cable Display Link

UPS OUT 24 V

C9900-E276.

www.beckhoff.com/CP-Link4

With CP-Link 4 operating panels can be located up to 100 m away from the Industrial PC. The one cable solution can be used to transfer video signals, USB 2.0 and the power supply in an industrial Cat.6_A cable, thus significantly reducing cable and installation costs. A further benefit is the use of purely passive displays. The CP-Link 4 technology is supported by the new Beckhoff multi-touch panel series CP29xx-0010 (built-in version) and CP39xx-0010 (mounting arm version).

CP-Link 4 – The Two Cable Display Link

The CP29xx-0010 multi-touch built-in panels and the CP39xx-0010 multi-touch panels for mounting arm installation can be operated up to 100 m away from the PC. CP-Link 4 – The Two Cable Display Link – transfers DVI and USB together via a Cat.6A cable. The CU8802 CP-Link 4 transmitter box is connected to the PC via DVI and USB, or else the C9900-E276 PCIe module for CP-Link 4 is installed in the PC.

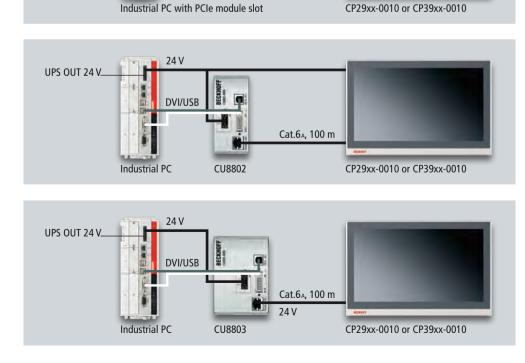
CP-Link 4 – The One Cable Display Link

The power supply for the Control Panel can also be provided via CP-Link 4 – The One Cable Display Link. The CU8803 CP-Link 4 transmitter box is used instead of the CU8802 or the PCIe module. The Control Panel remains unchanged. The CU8803 transmitter box provides power to the Control Panel via the Cat. 6_A cable, which also transfers DVI and USB. The power supply socket of the panel is not used.

CP-Link 4 – The Two Cable Display Link: via C9900-E276 PCIe module integrated in the PC

CP-Link 4 – The Two Cable Display Link: via CU8802 transmitter box

CP-Link 4 – The One Cable Display Link: DVI, USB and 24 V via CU8803 transmitter box



24 V

Cat.6_A, 100 m

Beckhoff multi-touch Control Panels in customer-specific features and designs

Beckhoff Control Panels can be designed and built for customer-specific requirements. The spectrum of options is exceptionally broad and ranges from company logos or special labels and individualised functions to IPCs built in total accordance with the customer's corporate design.



Multi-touch Control Panel in portrait orientation with customised push-button extension



15-inch multi-touch Control Panel with RFID reader, emergency stop and 3 RGB illuminated ring keys



Multi-touch Control Panel with RGB illuminated ring keys



Multi-touch Control Panel with emergency stop, electromechanical keys and graycode switch



Multi-touch Control Panel with emergency stop, start/stop keys and membrane keys with slide-in labels



21.5-inch multi-touch Control Panel for machine tools



Multi-touch Control Panel with company logo and keyboard shelf



Multi-touch Control Panel in the customer's corporate design



with push-button extension



18.5-inch multi-touch Control Panel with emergency stop and 3 buttons, connection alternatively via USB or directly wired



Multi-touch Control Panel in the customer's corporate design



Multi-touch Control Panel with individualised functions



CP29xx | Multi-touch built-in Control Panel



Ordering information	Multi-finger touch screen with DVI/USB Extended	Multi-finger touch screen with CP-Link 4
7-inch display 800 x 480	CP2907-0000	CP2907-0010
12-inch display 800 x 600	CP2912-0000	CP2912-0010
12.1-inch display 1280 x 800	CP2913-0000	CP2913-0010
15-inch display 1024 x 768	CP2915-0000	CP2915-0010
15.6-inch display 1366 x 768	CP2916-0000	CP2916-0010
18.5-inch display 1366 x 768	CP2918-0000	CP2918-0010
19-inch display 1280 x 1024	CP2919-0000	CP2919-0010
21.5-inch display 1920 x 1080	CP2921-0000	CP2921-0010
24-inch display 1920 x 1080	CP2924-0000	CP2924-0010



CP29xx	CP29xx-0000	CP29xx-0010
Features	TFT display in nine sizes	TFT display in nine sizes
	aluminium housing with glass front,	aluminium housing with glass front,
	front side IP 65, rear side IP 20	front side IP 65, rear side IP 20
	multi-finger touch screen	multi-finger touch screen
	 multi-finger touch screen driver for Windows 7 	 multi-finger touch screen driver for Windows 7
	 single-finger touch screen driver for Windows XP 	 single-finger touch screen driver for Windows XP
	and Windows CE 6	and Windows CE 6
	integrated DVI/USB extension technology	integrated CP-Link 4 connection technology
	 DVI-E and USB-E 2.0 enable remote panel operation 	 CP-Link 4 enables remote panel operation at a distance
	at a distance of up to 50 m from the PC.	of up to 100 m from the PC via a Cat.6 $_{\mathbb{A}}$ cable with
	 USB-E 2.0 transmits USB 2.0 with 480 Mbit/s. 	integrated or separate 24 V DC power supply dependin
	 DVI-E input is compatible to the standard DVI output 	on the transmitter module.
	of a PC.	- CP-Link 4 transmits USB 2.0 with 100 Mbit/s and DVI.
	USB 3.0 input for the direct connection to a standard USB	connection via an RJ45 connector for CP-Link 4 in the
	output of a PC with distances of up to 3 m	backplane
	2-port USB 3.0 socket inside the Control Panel backplane, for USB-E 2.0 limited to USB 2.0	additional pin contact strip, for optional 24 V power supply
	all connectors at the lower rear side	2-port USB 2.0 socket inside the Control Panel backplane
	24 V power supply	all connectors at the lower rear side
	operating temperature 055 °C	operating temperature 050 °C
	pull-out clamping levers for fast installation	pull-out clamping levers for fast installation
	without loose parts	without loose parts
Further information	for further options, technical drawings, documentations, etc.	see www.beckhoff.com/CP29xx



CPX29xx | Multi-touch built-in Control Panel with DVI/USB Extended interface

For use in hazardous areas, Zone 2/22

Ordering information	Multi-finger touch screen
15-inch display 1024 x 768	CPX2915-0000
19-inch display 1280 x 1024	CPX2919-0000
21.5-inch display 1920 x 1080	CPX2921-0000

CPX29xx	CPX29xx-0000
Features	TFT display in three sizes
	aluminium housing with glass front, front side IP 65, rear side IP 20
	for use in hazardous areas, Zone 2/22
	multi-finger touch screen
	 multi-finger touch screen driver, included in Windows 7 and Windows 10
	 single-finger touch screen driver, available for Windows XP and Windows CE 6
	integrated DVI/USB extension technology
	 DVI-E and USB-E 2.0 enable remote panel operation at a distance of up to 50 m from the PC.
	- USB-E 2.0 transmits USB 2.0 with 480 Mbit/s.
	 DVI-E input is compatible to the standard DVI output of a PC.
	USB 3.0 input for the direct connection to a standard USB output of a PC with distances of up to 3 m
	2-port USB 3.0 socket inside the Control Panel backplane, for USB-E 2.0 limited to USB 2.0
	all connectors at the lower rear side
	24 V power supply
	operating temperature 055 °C
	pull-out clamping levers for fast installation without loose parts
	solid clamping frame for even pressure distribution on the seal
Further information	for further options, technical drawings, documentations, etc. see www.beckhoff.com/CPX29xx



CPX39xx | Multi-touch Control Panel with CP-Link 4 – The One Cable Display Link

For use in hazardous areas, Zone 2/22

Ordering information	Multi-finger touch screen
15-inch display 1024 x 768	CPX3915-0010
19-inch display 1280 x 1024	CPX3919-0010
21.5-inch display 1920 x 1080	CPX3921-0010

CPX39xx	CPX39xx-0010
Features	TFT display in three sizes
	aluminium housing with glass front, protection class IP 65
	for use in hazardous areas, Zone 2/22
	multi-finger touch screen
	 multi-finger touch screen driver, included in Windows 7 and Windows 10
	 single-finger touch screen driver, available for Windows XP and Windows CE 6
	integrated CP-Link 4 connection technology
	– CP-Link 4 enables remote panel operation at a distance of up to 100 m from the PC via a Cat.6A cable
	with integrated or separate 24 V DC power supply depending on the transmitter module.
	 CP-Link 4 transmits USB 2.0 with 100 Mbit/s and DVI.
	connection via M12 round connector (IP 65) for CP-Link 4 in the backplane
	additional M12 round connector for optional 24 V power supply
	operating temperature 050 °C
	For mounting four M6 threaded holes at a distance of 100 x 100 mm in the connection block on the rear wall.
	The plug connectors for connecting the Control Panel are plugged into the connection block from underneath.
Further information	for further options, technical drawings, documentations, etc. see www.beckhoff.com/CPX39xx



CP39xx | Multi-touch Control Panel



Ordering information	Multi-finger touch screen with DVI/USB Extended	Multi-finger touch screen with CP-Link 4
7-inch display 800 x 480	CP3907-0000	CP3907-0010
12-inch display 800 x 600	CP3912-0000	CP3912-0010
12.1-inch display 1280 x 800	CP3913-0000	CP3913-0010
15-inch display 1024 x 768	CP3915-0000	CP3915-0010
15.6-inch display 1366 x 768	CP3916-0000	CP3916-0010
18.5-inch display 1366 x 768	CP3918-0000	CP3918-0010
19-inch display 1280 x 1024	CP3919-0000	CP3919-0010
21.5-inch display 1920 x 1080	CP3921-0000	CP3921-0010
24-inch display 1920 x 1080	CP3924-0000	CP3924-0010



CP39xx	CP39xx-0000	CP39xx-0010
Features	TFT display in nine sizes	TFT display in nine sizes
	aluminium housing with glass front, protection class IP 65	aluminium housing with glass front, protection class IP 65
	multi-finger touch screen	multi-finger touch screen
	 multi-finger touch screen driver, 	 multi-finger touch screen driver,
	included in Windows 7 and Windows 10	included in Windows 7 and Windows 10
	 single-finger touch screen driver, available 	 single-finger touch screen driver, available
	for Windows XP and Windows CE 6	for Windows XP and Windows CE 6
	integrated DVI/USB extension technology	integrated CP-Link 4 connection technology
	 DVI-E and USB-E 2.0 enable remote panel operation 	 CP-Link 4 enables remote panel operation at a distance
	at a distance of up to 50 m from the PC.	of up to 100 m from the PC via a Cat.6 ${\mbox{\tiny A}}$ cable with
	 USB-E 2.0 transmits USB 2.0 with 480 Mbit/s. 	integrated or separate 24 V DC power supply depending
	 DVI-E input is compatible to the standard DVI output 	on the transmitter module.
	of a PC.	 CP-Link 4 transmits USB 2.0 with 100 Mbit/s and DVI.
	connection via 3 round connectors (IP 65) for DVI,	connection via M12 round connector (IP 65) for
	USB-E 2.0 and 24 V power supply unit in the backplane	CP-Link 4 in the backplane
	24 V power supply	additional M12 round connector for optional 24 V
		power supply
	operating temperature 055 °C	operating temperature 050 °C
Further information	for further options, technical drawings, documentations, etc.	see www.beckhoff.com/CP39xx

Industrial PC

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Accessories for CP2xxx and CP3xxx multi-touch Control Panels and Panel PCs

www.beckhoff.com/IPC-accessories





C9900-M406 | Keyboard shelf for CP3xxx multi-touch Control Panels and Panel PCs

The keyboard shelf at a Beckhoff Panel PC or Control Panel permits a standard PC keyboard to be placed in front of the Control Panel, allowing convenient operation during commissioning or software updates. During normal production, the machine operator can rest tools and other items here while using the multi-finger touch screen.

A USB socket is integrated at the back of the keyboard shelf for connecting the keyboard. Any keyboard USB cable excess can be wrapped around a bracket at the underside of the keyboard shelf.

The shelf is made of coated aluminium, and its design matches that of the Control Panel. The keyboard shelf has a width of 468 mm.



Ordering information	Keyboard shelf for CP3xxx
C9900-M406	Toolboard for keyboard or tools, mounted under a Control Panel or Panel PC CP3xxx, with integrated USB socket IP 65
	at the back side, can only be ordered in combination with the Control Panel or Panel PC.



C9900-G00x, -G01x | **Push-button extension for built-in CP2xxx multi-touch panels**

C9900-G00x, -G01x	Push-button extension for built-in multi-touch panels
Features	push-button extension below
	push-button keys with signal lamp, type RAFI RAFIX 22FS+, round, 30 mm
	1 emergency stop key, type RAFI RAFIX 22FS+
	labels for push-button caps for individual marking of each push-button
	All push-buttons are transmitted via USB with one normally-open contact.
	Additionally, all push-buttons are directly wireable with a second normally-open contact via a terminal row.
	All signal lamps are transmitted via USB only.
	Selector switches and keylock switches as well as other elements from the series RAFIX 22FS+ are integrateable.
Further information	www.beckhoff.com/C9900-G00x

Ordering information	Push-button extension for built-in multi-touch panels
C9900-G002	push-button extension for CP2x12 12" landscape: 4 push-button keys and 1 emergency stop key
C9900-G009	push-button extension for CP2x13 12.1" landscape: 4 push-button keys and 1 emergency stop key
C9900-G003	push-button extension for CP2x15 15" landscape: 7 push-button keys and 1 emergency stop key
C9900-G004	push-button extension for CP2x16 15.6" landscape: 8 push-button keys and 1 emergency stop key
C9900-G005	push-button extension for CP2x18 18.5" landscape: 10 push-button keys and 1 emergency stop key
C9900-G006	push-button extension for CP2x19 19" landscape: 9 push-button keys and 1 emergency stop key
C9900-G008	push-button extension for CP2x21 21.5" landscape: 12 push-button keys and 1 emergency stop key
C9900-G007	push-button extension for CP2x24 24" landscape: 13 push-button keys and 1 emergency stop key
C9900-G012	push-button extension for CP2x12 12" portrait: 3 push-button keys and 1 emergency stop key
C9900-G013	push-button extension for CP2x15 15" portrait: 4 push-button keys and 1 emergency stop key
C9900-G014	push-button extension for CP2x16 15.6" portrait: 4 push-button keys and 1 emergency stop key
C9900-G015	push-button extension for CP2x18 18.5" portrait: 4 push-button keys and 1 emergency stop key
C9900-G016	push-button extension for CP2x19 19" portrait: 7 push-button keys and 1 emergency stop key
C9900-G018	push-button extension for CP2x21 21.5" portrait: 6 push-button keys and 1 emergency stop key
C9900-G017	push-button extension for CP2x24 24" portrait: 6 push-button keys and 1 emergency stop key



C9900-G02x, -G03x | **Push-button extension for CP3xxx multi-touch** panels with mounting arm

C9900-G02x, -G03x	Push-button extension for multi-touch panels with mounting arm
Features	push-button extension below
	push-button keys with signal lamp, type RAFI RAFIX 22FS+, round, 30 mm
	1 emergency stop key, type RAFI RAFIX 22FS+
	labels for push-button caps for individual marking of each push-button
	All push-buttons are transmitted via USB with one normally-open contact.
	Additionally, all push-buttons are directly wireable with a second normally-open contact via a terminal row.
	All signal lamps are transmitted via USB only.
	aluminium cable channel to the mounting arm adapter on the backside
	Selector switches and keylock switches as well as other elements from the series RAFIX 22FS+ are integrateable.
Further information	www.beckhoff.com/C9900-G02x

Ordering information	Push-button extension for multi-touch panels with mounting arm
C9900-G022	push-button extension for CP3912 12" landscape: 4 push-button keys and 1 emergency stop key
C9900-G029	push-button extension for CP3913 12.1" landscape: 4 push-button keys and 1 emergency stop key
C9900-G023	push-button extension for CP3915 15" landscape: 7 push-button keys and 1 emergency stop key
C9900-G024	push-button extension for CP3916 15.6" landscape: 8 push-button keys and 1 emergency stop key
C9900-G025	push-button extension for CP3918 18.5" landscape: 10 push-button keys and 1 emergency stop key
C9900-G026	push-button extension for CP3919 19" landscape: 9 push-button keys and 1 emergency stop key
C9900-G028	push-button extension for CP3921 21.5" landscape: 12 push-button keys and 1 emergency stop key
C9900-G027	push-button extension for CP3924 24" landscape: 13 push-button keys and 1 emergency stop key
C9900-G032	push-button extension for CP3912 12" portrait: 3 push-button keys and 1 emergency stop key
C9900-G033	push-button extension for CP3915 15" portrait: 4 push-button keys and 1 emergency stop key
C9900-G034	push-button extension for CP3916 15.6" portrait: 4 push-button keys and 1 emergency stop key
C9900-G035	push-button extension for CP3918 18.5" portrait: 4 push-button keys and 1 emergency stop key
C9900-G036	push-button extension for CP3919 19" portrait: 7 push-button keys and 1 emergency stop key
C9900-G038	push-button extension for CP3921 21.5" portrait: 6 push-button keys and 1 emergency stop key
C9900-G037	push-button extension for CP3924 24" portrait: 6 push-button keys and 1 emergency stop key

Single-touch Control Panels CP6xxx and CP7xxx

www.beckhoff.com/singletouch-control-panel

What frame does an image need?

The carefully planned use of design elements gives the Control Panel its reserved and elegant appearance.

The open design possibilities of a membrane keyboard are fully exploited here. The robust keyboard ensures that the IP 65 protection class is retained as if new, even after long use in a tough industrial environment. Light emitting diodes are integrated into the keys, while slide-in labels mean that exchangeable key identification can match the needs of the plant.

The emergency stop at the Control Panel

Push-button extensions in the design of the Control Panel make it thicker, but permit the application-specific arrangement of electromechanical keys and other components such as all kinds of switches, barcode scanners, graycode switches and handwheels. External housings can be attached to either side of the Control Panel. The signal leads may be laid separately or can be operated via USB.

Assembly

The back plate of the Control Panel series CP7xxx offers a free surface for a variety of assembly methods, for example a mounting arm system.





Mounting arm



Additional keyboard in IP 65



Touch pad



USB socket in IP 65

Control Panel for installation in the control cabinet door

The built-in Control Panels CP6xxx are designed for control cabinet installation. Only 4 mm of the front are visible in front of the control cabinet wall. Installation via pull-out clamping levers makes the process very simple without loose parts.

The built-in Control Panels CP69xx are available with 5.7-, 6.5-, 12-, 15-inch or 19-inch TFT display, with touch screen or touch pad, as a monitor without keyboard or with different membrane keyboard models up to full alphanumeric keyboards with 10 PLC special keys and 10 LEDs. The same range of push-button extensions with electromechanical keys as for the CP7xxx series is available.

The Control Panels are connected to the PC with a DVI/USB Extended interface for distances up to 50 m.

The Control Panel toolkit

A housing that can be dimensioned precisely in line with the needs of the particular application according to the customer's wishes can be combined with an individually designed membrane keyboard. This puts customisation on a wide footing at Beckhoff. Hardly one Control Panel is like another.

The Bus Terminal interface integrated into the Control Panel permits the connection of standard Beckhoff Bus Terminals to realise handwheels, graycode switches, buttons, switches, indicator lamps or other components without any additional wiring. Such elements can be integrated into the Control Panel and connected to the PC via USB.



Customised Beckhoff CP6xxx/CP7xxx Control Panels

- cost-effective implementation of company logos in form of a slide-in label for standard Control Panels
- complete revision of the colour scheme of the front membrane based on the corporate design of the company
- customised keyboard extensions according to customer specifications
- realisation of customer-specific bracket adapter plates for integrating different bracket systems
- realisation of complex operating terminals with fieldbus connections (PROFIBUS, Lightbus, CANopen, Ethernet, ...)
- modification of the mechanical/electrical connection of the devices according to the local situation
- joint development and realisation of the design



Stainless steel Panel PC



Individual housing adaptation



Customer-specific front laminate



Modified membrane keypad colour scheme and keypad matrix



Individual housing construction



Individual housing construction for flush-mounted installation



Individual housing design, colour scheme and key shape/layout according to customer requirements



Push-button extension with hand wheel



Panel PC for injection molding applications



Extension with additional display, incremental encoders and switch elements



Integration of a barcode scanner and signal transducer



Individual housing construction



Control solution for blow molding machines



Extension with joystick, graycode switch and incremental encoder



Keyboard with larger number and higher density of membrane keys



Front membrane design with modified colour scheme and different size membrane keys

CP69xx, CP79xx | "Economy" Control Panels with DVI/USB Extended interface

www.beckhoff.com/CP69xx

www.beckhoff.com/CP79xx

The digital visual interface (DVI), defined as successor to analog VGA connections, digitally transfers the PC image to the display. The universal serial bus (USB) enables connection of input devices and drives to the PC. DVI/USB Extended enables CP69xx and CP79xx "Economy" Control Panels to be operated at a distance of up to 50 metres from the PC. Apart from a graphics card or a motherboard with DVI output and the USB port available with every motherboard, no additional card is required in the PC.

CP79xx Control Panels are designed for mounting arm installation. They offer all-round IP 65 protection. To this end they are equipped via industrial IP 65 round connectors for DVI or USB Extended and the 24 V power supply. The CP69xx built-in Control Panels are connected via standard USB and DVI connectors and feature an industrial pin contact strip for the 24 V power supply. A 2-port USB socket in the rear panel enables connection of keyboard, mouse, USB stick or CD/DVD drive. USB Extended transfers the data with 12 Mbit/s according to USB 1.1.





CP69xx | "Economy" built-in Control Panel

DVI/USB Extended

With the DVI/USB Extended technology, Control Panel and Industrial PC can be operated at distances of up to 50 m. The DVI graphics signal from the PC is directly transmitted via a DVI-E cable. The Control Panel is equipped with a signal processor, which restores the DVI signal after 50 m.

For the connection of CP69xx and CP79xx Control Panels, the CU8800 USB Extender box is connected to a USB port of the PC. The CU8800 converts the USB



CP79xx | "Economy" Control Panel

signal coming from the PC to USB Extended (USB-E) and transmits it to the Control Panel via up to 50 m of Cat.5 cable, where it is reconverted to USB 1.1 with data rates of 12 Mbit/s.

A USB hub in the Control Panel enables the connection of external USB devices such as a keyboard or USB stick in addition to touch screen, membrane keyboard and pushbutton extension. It is not possible, however, to connect an additional USB hub to the Control Panel.



DVI/USB Extended

The CU8800 USB Extender box does not require auxiliary power supply. It has a USB input and an RJ45 USB Extended output. The box is available in a set with all required cables in various lengths to bridge distances of up to 50 m between PC and Control Panel.

For smaller distances of up to 5 m, CP69xx Control Panels and PC can be directly connected via a USB cable, whereas the CP79xx Control Panels have to be connected by means of the CU8800 USB Extender no matter what distance.





CP69xx | "Economy" built-in Control Panel with DVI/USB Extended interface

Ordering information	without touch screen	with single-touch screen	with touch pad
Display only			
5.7-inch display 640 x 480	CP6907-0000-0000	CP6907-0001-0000	
6.5-inch display 640 x 480	CP6909-0000-0000	CP6909-0001-0000	
12-inch display 800 x 600	CP6901-0000-0000	CP6901-0001-0000	
15-inch display 1024 x 768	CP6902-0000-0000	CP6902-0001-0000	
19-inch display 1280 x 1024	CP6903-0000-0000	CP6903-0001-0000	
Display only, USB A socket in the	e front		
12-inch display 800 x 600	CP6901-0020-0000	CP6901-0021-0000	
15-inch display 1024 x 768	CP6902-0020-0000	CP6902-0021-0000	
19-inch display 1280 x 1024	CP6903-0020-0000	CP6903-0021-0000	
With function keys			
6.5-inch display 640 x 480	CP6919-0000-0000	CP6919-0001-0000	
12-inch display 800 x 600	CP6911-0000-0000	CP6911-0001-0000	
15-inch display 1024 x 768	CP6912-0000-0000	CP6912-0001-0000	
19-inch display 1280 x 1024	CP6913-0000-0000	CP6913-0001-0000	
Numeric keyboard			
6.5-inch display 640 x 480	CP6929-0000-0000	CP6929-0001-0000	
12-inch display 800 x 600	CP6921-0000-0000	CP6921-0001-0000	CP6921-0002-0000
15-inch display 1024 x 768	CP6922-0000-0000	CP6922-0001-0000	CP6922-0002-0000
19-inch display 1280 x 1024	CP6923-0000-0000	CP6923-0001-0000	CP6923-0002-0000
Alphanumeric keyboard			
12-inch display 800 x 600	CP6931-0000-0000	CP6931-0001-0000	CP6931-0002-0000
15-inch display 1024 x 768	CP6932-0000-0000	CP6932-0001-0000	CP6932-0002-0000
19-inch display 1280 x 1024	CP6933-0000-0000	CP6933-0001-0000	CP6933-0002-0000
Alphanumeric keyboard with PLC keys on the sides			
15-inch display 1024 x 768	CP6942-0000-0000	CP6942-0001-0000	









Alphanumeric keyboard



Alphanumeric keyboard with PLC keys on the sides

Without keys

CP69xx

Function keys

Numeric keyboard

"Economy" built-in Control Panel TFT display in five sizes Features aluminium front with sheet-steel rear cover, front side IP 65, rear side IP 20 front laminate in five variants only display _ function keys and 10 PLC special keys with LED _ numeric keyboard and 10 PLC special keys with LED alphanumeric PC keyboard in US layout and 10 PLC special keys with LED _ _ alphanumeric PC keyboard in US layout and 16 PLC special keys with LED on the sides integrated DVI/USB extension technology DVI-E and USB-E enable remote panel operation at a distance of up to 50 m from the PC. _ DVI-E input is compatible to the standard DVI output of a PC. _ USB input for the direct connection to a standard USB output of a PC with distances of up to 5 m all connectors at the lower rear side 24 V power supply operating temperature 0...55 °C pull-out clamping levers for fast installation without loose parts Options touch screen pen with wall holder push-button extension with electromechanical switches and keys connecting kits for up to 50 m distance to the PC wall mounting frame for building installation Stainless steel options stainless steel front (1.4301) with bevelled edges at top and bottom and touch screen for CP690x **Further information** for further options, technical drawings, documentations, etc. see www.beckhoff.com/CP69xx

CP6906, CP6900 | "Economy" built-in Control Panels with DVI/USB Extended interface

www.beckhoff.com/CP6906

www.beckhoff.com/CP6900

The CP6906 and CP6900 "Economy" Control Panel series expands the IPC entry-level class by two built-in Control Panels with DVI/USB Extended interface. The panels are designed for installation in the front of a control cabinet and have a 7-inch respectively a 10.1-inch touch screen display. Ideally combined with the compact Embedded PCs in the CX series or C6xxx series Industrial PCs, this results in an inexpensive PC/panel combination. Both Control Panel types are supplied with a 24 V power supply unit. The integrated DVI/USB Extended technology enables remote panel operation at a distance of up to 50 m from the PC.





CP6906, CP6900 | "Economy" built-in Control Panels with DVI/USB Extended interface

Ordering information	with single-touch screen
7-inch display 800 x 480	CP6906-0001-0000
10.1-inch display 1024 x 600	CP6900-0001-0000

CP6906, CP6900	CP69xx-0001-0000
Features	TFT display in two sizes
	aluminium front with sheet-steel rear cover, front side IP 54, rear side IP 20
	touch screen
	without keys
	integrated DVI/USB extension technology
	 DVI-E and USB-E enable remote panel operation at a distance of up to 50 m from the PC.
	 DVI-E input is compatible to the standard DVI output of a PC.
	USB input for the direct connection to a standard USB output of a PC with distances of up to 5 m
	all connectors at the lower rear side
	24 V power supply
· ·	operating temperature 055 °C
	pull-out clamping levers for fast installation without loose parts
Options	touch screen pen with wall holder
	connecting kits for up to 50 m distance to the PC
Further information	for further options, technical drawings, documentations, etc. see www.beckhoff.com/CP6906



CP79xx | "Economy" Control Panel with DVI/USB Extended interface

Ordering information	without touch screen	with single-touch screen	with touch pad
Display only			
6.5-inch display 640 x 480	CP7909-0000-0000	CP7909-0001-0000	
12-inch display 800 x 600	CP7901-0000-0000	CP7901-0001-0000	
15-inch display 1024 x 768	CP7902-0000-0000	CP7902-0001-0000	
19-inch display 1280 x 1024	CP7903-0000-0000	CP7903-0001-0000	
Display only, USB A socket in the	e front		
12-inch display 800 x 600	CP7901-0020-0000	CP7901-0021-0000	
15-inch display 1024 x 768	CP7902-0020-0000	CP7902-0021-0000	
19-inch display 1280 x 1024	CP7903-0020-0000	CP7903-0021-0000	
With function keys			
6.5-inch display 640 x 480	CP7919-0000-0000	CP7919-0001-0000	
12-inch display 800 x 600	CP7911-0000-0000	CP7911-0001-0000	
15-inch display 1024 x 768	CP7912-0000-0000	CP7912-0001-0000	
19-inch display 1280 x 1024	CP7913-0000-0000	CP7913-0001-0000	
Numeric keyboard			
6.5-inch display 640 x 480	CP7929-0000-0000	CP7929-0001-0000	
12-inch display 800 x 600	CP7921-0000-0000	CP7921-0001-0000	CP7921-0002-0000
15-inch display 1024 x 768	CP7922-0000-0000	CP7922-0001-0000	CP7922-0002-0000
19-inch display 1280 x 1024	CP7923-0000-0000	CP7923-0001-0000	CP7923-0002-0000
Alphanumeric keyboard			
12-inch display 800 x 600	CP7931-0000-0000	CP7931-0001-0000	CP7931-0002-0000
15-inch display 1024 x 768	CP7932-0000-0000	CP7932-0001-0000	CP7932-0002-0000
19-inch display 1280 x 1024	CP7933-0000-0000	CP7933-0001-0000	CP7933-0002-0000
Alphanumeric keyboard with PL	C keys on the sides		
15-inch display 1024 x 768	CP7942-0000-0000	CP7942-0001-0000	
Stainless steel housing		with single-touch screen	with single-touch screen,
			push-buttons and USB socket
12-inch display 800 x 600		CP7901-1400-0000	CP7901-1401-0000
15-inch display 1024 x 768		CP7902-1400-0000	CP7902-1401-0000
19-inch display 1280 x 1024		CP7903-1400-0000	CP7903-1401-0000





Without keys

Numeric keyboard

Alphanumeric keyboard



Alphanumeric keyboard with PLC keys on the sides

CP79xx	"Economy" Control Panel
Features	TFT display in four sizes
	aluminium housing, protection class IP 65
	front laminate in five variants
	– only display
	 function keys and 10 PLC special keys with LED
	 numeric keyboard and 10 PLC special keys with LED
	 alphanumeric PC keyboard in US layout and 10 PLC special keys with LED
	 alphanumeric PC keyboard in US layout and 16 PLC special keys with LED on the sides
	special keys identified by slide-in labels
	integrated DVI/USB extension technology
	 DVI-E and USB-E enable remote panel operation at a distance of up to 50 m from the PC.
	 DVI-E input is compatible to the standard DVI output of a PC.
	connection via 3 round connectors (IP 65) for DVI, USB-E and 24 V power supply unit in the backplane
	operating temperature 055 °C
	for mounting 4 M6 x 18 mm threaded holes in the backplane
Options	2-port IP 65 USB interface in the backplane
	touch screen pen with holder for aluminium Control Panels
	additional keyboard IP 65 or toolboard for keyboard and tools
	push-button extension with electromechanical switches and keys
	connection set up to 50 m length
	adapter plate for mounting arm installation
Stainless steel options	stainless steel housing with flush-mounted touch screen for CP7901, CP7902 and CP7903
Further information	for further options, technical drawings, documentations, etc. see www.beckhoff.com/CP79xx

Accessories for CP6xxx and CP7xxx single-touch Control Panels and Panel PCs





Keyboard shelf



Touch screen pen



Additional keyboard

RFID reader

Electromechanical buttons on the Control Panel or Panel PC

Control Panels and Panel PCs with pushbutton extension enable the applicationspecific arrangement of electromechanical buttons, switches, signal lamps, additional membrane keys and a hand wheel directly on the operating unit. It enables precise adaptation of the Control Panel to the machine control requirements. In many cases, a machine operator control panel is no longer required, since all functions are integrated in the Control Panel. The Control Panel housing is increased in size on one side. Depending on the required functions and the electromechanical components, the flat rear panel is enlarged or extended with a trough-shaped rear panel for the button area.

For the CP77xx and CP79xx units the Rolec Tara Plus mounting arm system, article numbers 149.025.012, 149.025.013, 149.025.014, 149.035.012, 149.035.013 or 149.035.015, can be mounted centrally at the rear of the Control Panel. The mounting arm can optionally be connected from above or below. The Rittal mounting arm system is available as an additional option. The CP6508.020 or CP6501.170 Rittal adapters can be mounted at the back of the Control Panel. The cables are routed through the mounting arm, through a cable gland in the mounting arm adapter and from there concealed through a channel at the rear of the Control Panel to the push-button extension. A circular plug-in connector instead of a screwed cable gland is available on request. The housings of the CP7xxx range have protection class IP 65 on all sides. The wiring space can be opened without removing the Control Panel from the mounting arm.

The buttons, switches and indicator lamps are connected to the control system via USB. A second contact on the buttons and switches can at the same time be wired directly via a terminal row. Besides the pushbutton extensions shown on the following pages, numerous other variants are conceivable, which can be individually designed in accordance with requirements.





Open wiring space



Push-button extensions for CP6xxx

C9900-Exxx	Push-button extension for "Economy" built-in Panel PCs, built-in Panel PCs, "Economy" built-in Control Panels	
Features	push-button extension on the right side	
	push-button keys with signal lamp, type Siemens Signum square, 30 x 30 mm	
	1 emergency stop key Siemens Signum	
	Labels for push-button caps allow individual marking.	
	All push-buttons are transmitted via USB with one normally-open contact.	
	Additionally, all push-buttons are directly wireable with a second normally-open contact via a terminal row.	
	All signal lamps are transmitted via USB only.	
	Selector switches and keylock switches as well as other elements from the Signum series are integrateable on request.	
Options	A circular plug-in connector is available on request (instead of a screwed cable gland).	
Further information	www.beckhoff.com/C9900-Exxx	

Ordering information	Push-button extension for "Economy" built-in Panel PC CP62xx
С9900-Е505	push-button extension for CP6221 with 12" display and numeric keyboard, 12 push-button keys with signal lamp
С9900-Е515	push-button extension for CP6231 with 12" display and alphanumeric keyboard, 16 push-button keys with signal lamp
С9900-Е545	push-button extension for CP6202 with 15" display and without keyboard, 16 push-button keys with signal lamp
С9900-Е555	push-button extension for CP6212 with 15" display and function keys, 16 push-button keys with signal lamp
С9900-Е565	push-button extension for CP6222 with 15" display and numeric keyboard, 14 push-button keys with signal lamp
С9900-Е575	push-button extension for CP6232 with 15" display and alphanumeric keyboard, 18 push-button keys with signal lamp
С9900-Е525	push-button extension for CP6203 with 19" display and without keyboard, 20 push-button keys with signal lamp
С9900-Е535	push-button extension for CP6213 with 19" display and function keys, 20 push-button keys with signal lamp
С9900-Е594	push-button extension for CP6223 with 19" display and numeric keyboard, 20 push-button keys with signal lamp
С9900-Е595	push-button extension for CP6233 with 19" display and alphanumeric keyboard, 20 push-button keys with signal lamp



Ordering information	Push-button extension for built-in Panel PC CP65xx
С9900-Е705	push-button extension for CP6521 with 12" display and numeric keyboard, 12 push-button keys with signal lamp
С9900-Е715	push-button extension for CP6531 with 12" display and alphanumeric keyboard, 16 push-button keys with signal lamp
С9900-Е745	push-button extension for CP6502 with 15" display and without keyboard, 16 push-button keys with signal lamp
С9900-Е755	push-button extension for CP6512 with 15" display and function keys, 16 push-button keys with signal lamp
С9900-Е765	push-button extension for CP6522 with 15" display and numeric keyboard, 14 push-button keys with signal lamp
С9900-Е775	push-button extension for CP6532 with 15" display and alphanumeric keyboard, 18 push-button keys with signal lamp
С9900-Е725	push-button extension for CP6503 with 19" display and without keyboard, 20 push-button keys with signal lamp
С9900-Е735	push-button extension for CP6513 with 19" display and function keys, 20 push-button keys with signal lamp
С9900-Е796	push-button extension for CP6523 with 19" display and numeric keyboard, 20 push-button keys with signal lamp
С9900-Е797	push-button extension for CP6533 with 19" display and alphanumeric keyboard, 20 push-button keys with signal lamp

Ordering information	Push-button extension for "Economy" built-in Panel PC CP66xx
С9900-Е406	push-button extension for CP6621 with 12" display and numeric keyboard, 12 push-button keys with signal lamp
С9900-Е416	push-button extension for CP6631 with 12" display and alphanumeric keyboard, 16 push-button keys with signal lamp
С9900-Е446	push-button extension for CP6602 with 15" display and without keyboard, 16 push-button keys with signal lamp
С9900-Е456	push-button extension for CP6612 with 15" display and function keys, 16 push-button keys with signal lamp
С9900-Е466	push-button extension for CP6622 with 15" display and numeric keyboard, 14 push-button keys with signal lamp
С9900-Е476	push-button extension for CP6632 with 15" display and alphanumeric keyboard, 18 push-button keys with signal lamp
С9900-Е426	push-button extension for CP6603 with 19" display and without keyboard, 20 push-button keys with signal lamp
С9900-Е436	push-button extension for CP6613 with 19" display and function keys, 20 push-button keys with signal lamp
С9900-Е496	push-button extension for CP6623 with 19" display and numeric keyboard, 20 push-button keys with signal lamp
C9900-E497	push-button extension for CP6633 with 19" display and alphanumeric keyboard, 20 push-button keys with signal lamp



Ordering information	Push-button extension for "Economy" built-in Panel PC CP67xx-00xx-0040/-0050
С9900-Е505	push-button extension for CP6721-00xx-0040/-0050 with 12" display and numeric keyboard,
	12 push-button keys with signal lamp
С9900-Е515	push-button extension for CP6731-00xx-0040/-0050 with 12" display and alphanumeric keyboard,
	16 push-button keys with signal lamp
С9900-Е545	push-button extension for CP6702-00xx-0040/-0050 with 15" display and without keyboard,
	16 push-button keys with signal lamp
С9900-Е555	push-button extension for CP6712-00xx-0040/-0050 with 15" display and function keys,
	16 push-button keys with signal lamp
С9900-Е565	push-button extension for CP6722-00xx-0040/-0050 with 15" display and numeric keyboard,
	14 push-button keys with signal lamp
С9900-Е575	push-button extension for CP6732-00xx-0040/-0050 with 15" display and alphanumeric keyboard,
	18 push-button keys with signal lamp
С9900-Е525	push-button extension for CP6703-00xx-0040/-0050 with 19" display and without keyboard,
	20 push-button keys with signal lamp
С9900-Е535	push-button extension for CP6713-00xx-0040/-0050 with 19" display and function keys,
	20 push-button keys with signal lamp
С9900-Е594	push-button extension for CP6723-00xx-0040/-0050 with 19" display and numeric keyboard,
	20 push-button keys with signal lamp
С9900-Е595	push-button extension for CP6733-00xx-0040/-0050 with 19" display and alphanumeric keyboard,
	20 push-button keys with signal lamp

Ordering information	Push-button extension for "Economy" built-in Control Panel CP69xx
С9900-Е905	push-button extension for CP6921 with 12" display and numeric keyboard, 12 push-button keys with signal lamp
С9900-Е915	push-button extension for CP6931 with 12" display and alphanumeric keyboard, 16 push-button keys with signal lamp
С9900-Е945	push-button extension for CP6902 with 15" display and without keyboard, 16 push-button keys with signal lamp
С9900-Е955	push-button extension for CP6912 with 15" display and function keys, 16 push-button keys with signal lamp
С9900-Е965	push-button extension for CP6922 with 15" display and numeric keyboard, 14 push-button keys with signal lamp
С9900-Е975	push-button extension for CP6932 with 15" display and alphanumeric keyboard, 18 push-button keys with signal lamp
С9900-Е925	push-button extension for CP6903 with 19" display and without keyboard, 20 push-button keys with signal lamp
С9900-Е935	push-button extension for CP6913 with 19" display and function keys, 20 push-button keys with signal lamp
С9900-Е996	push-button extension for CP6923 with 19" display and numeric keyboard, 20 push-button keys with signal lamp
С9900-Е997	push-button extension for CP6933 with 19" display and alphanumeric keyboard, 20 push-button keys with signal lamp



Push-button extensions for CP72xx

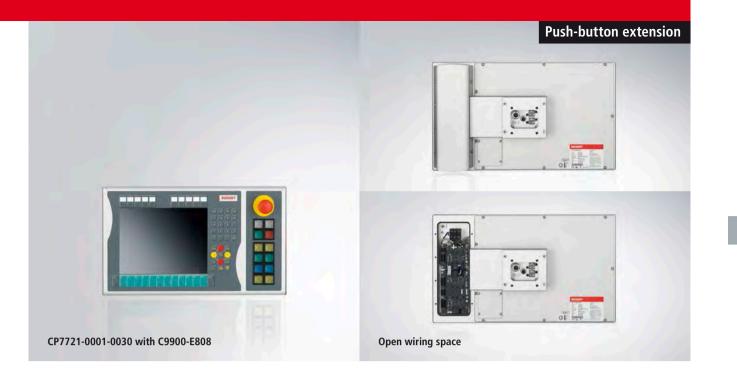
С9900-Е5хх	Push-button extension for "Economy" Panel PC
Features	push-button extension on the right side
	push-button keys with signal lamp, type Siemens Signum square, 30 x 30 mm
	1 emergency stop key Siemens Signum
	Labels for push-button caps allow individual marking.
	All push-buttons are transmitted via USB with one normally-open contact.
	Additionally, all push-buttons are directly wireable with a second normally-open contact via a terminal row.
All signal lamps are transmitted via USB only.	
	circular plug-in connector between push-button extension and connection section
	Selector switches for keylock switches as well as other elements from the Signum series are integrateable on request.
Further information	www.beckhoff.com/C9900-Exxx

Ordering information	Push-button extension for "Economy" Panel PC CP72xx
С9900-Е507	push-button extension for CP7221 with 12" display and numeric keyboard, 12 push-button keys with signal lamp
C9900-E517	push-button extension for CP7231 with 12" display and alphanumeric keyboard, 16 push-button keys with signal lamp
C9900-E547	push-button extension for CP7202 with 15" display and without keyboard, 16 push-button keys with signal lamp
C9900-E557	push-button extension for CP7212 with 15" display and function keys, 16 push-button keys with signal lamp
C9900-E567	push-button extension for CP7222 with 15" display and numeric keyboard, 14 push-button keys with signal lamp
C9900-E577	push-button extension for CP7232 with 15" display and alphanumeric keyboard, 18 push-button keys with signal lamp
C9900-E527	push-button extension for CP7203 with 19" display and without keyboard, 20 push-button keys with signal lamp
С9900-Е537	push-button extension for CP7213 with 19" display and function keys, 20 push-button keys with signal lamp
C9900-E597	push-button extension for CP7223 with 19" display and numeric keyboard, 20 push-button keys with signal lamp
С9900-Е599	push-button extension for CP7233 with 19" display and alphanumeric keyboard, 20 push-button keys with signal lamp



Push-button extensions for CP7xxx without mounting arm connection

С9900-Е7хх, -Е8хх	Push-button extension for Panel PC and Control Panel
Features	push-button extension on the right side
	push-button keys with signal lamp, type Siemens Signum square, 30 x 30 mm
	1 emergency stop key Siemens Signum
	Labels for push-button caps allow individual marking.
	All push-buttons are transmitted via USB with one normally-open contact.
	Additionally, all push-buttons are directly wireable with a second normally-open contact via a terminal row.
	All signal lamps are transmitted via USB only.
	without mounting arm connection
	without cable bushing
	Selector switches and keylock switches as well as other elements from the Signum series are integrateable on request.
Options	screwed cable gland for feeding a signal line into a push-button extension, mounting arm adapter plates
Further information	www.beckhoff.com/C9900-Exxx
Ordering information	Push-button extension for Panel PC CP77xx
С9900-Е801	push-button extension for CP7721 with 12" display and numeric keyboard, 12 push-button keys with signal lamp
С9900-Е811	push-button extension for CP7731 with 12" display and alphanumeric keyboard, 16 push-button keys with signal lamp
С9900-Е841	push-button extension for CP7702 with 15" display and without keyboard, 16 push-button keys with signal lamp
C9900-E851	push-button extension for CP7712 with 15" display and function keys, 16 push-button keys with signal lamp
C9900-E861	push-button extension for CP7722 with 15" display and numeric keyboard, 14 push-button keys with signal lamp
С9900-Е871	push-button extension for CP7732 with 15" display and alphanumeric keyboard, 18 push-button keys with signal lamp
С9900-Е823	push-button extension for CP7703 with 19" display and without keyboard, 20 push-button keys with signal lamp
С9900-Е831	push-button extension for CP7713 with 19" display and function keys, 20 push-button keys with signal lamp
С9900-Е892	push-button extension for CP7723 with 19" display and numeric keyboard, 20 push-button keys with signal lamp
С9900-Е893	push-button extension for CP7733 with 19" display and alphanumeric keyboard, 20 push-button keys with signal lamp
Ordering information	Push-button extension for Control Panel CP79xx
С9900-Е701	push-button extension for CP7921 with 12" display and numeric keyboard, 12 push-button keys with signal lamp
С9900-Е711	push-button extension for CP7931 with 12" display and alphanumeric keyboard, 16 push-button keys with signal lamp
С9900-Е741	push-button extension for CP7902 with 15" display and without keyboard, 16 push-button keys with signal lamp
С9900-Е751	push-button extension for CP7912 with 15" display and function keys, 16 push-button keys with signal lamp
С9900-Е761	push-button extension for CP7922 with 15" display and numeric keyboard, 14 push-button keys with signal lamp
С9900-Е771	push-button extension for CP7932 with 15" display and alphanumeric keyboard, 18 push-button keys with signal lamp
С9900-Е723	push-button extension for CP7903 with 19" display and without keyboard, 20 push-button keys with signal lamp
С9900-Е731	push-button extension for CP7913 with 19" display and function keys, 20 push-button keys with signal lamp
С9900-Е792	push-button extension for CP7923 with 19" display and numeric keyboard, 20 push-button keys with signal lamp
С9900-Е793	push-button extension for CP7933 with 19" display and alphanumeric keyboard, 20 push-button keys with signal lamp



Push-button extensions for CP7xxx with mounting arm adapter plate

С9900-Е7хх, -Е8хх	Push-button extension for Panel PC and Control Panel
Features	push-button extension on the right side
	push-button keys with signal lamp, type Siemens Signum square, 30 x 30 mm
	1 emergency stop key Siemens Signum
	Labels for push-button caps allow individual marking.
	All push-buttons are transmitted via USB with one normally-open contact.
	Additionally, all push-buttons are directly wireable with a second normally-open contact via a terminal row.
	All signal lamps are transmitted via USB only.
	mounting arm adapter plate at Control Panel backplane for top or bottom installation of mounting arm system Rolec
	Selector switches for keylock switches as well as other elements from the Signum series are integrateable on request.
	Circular plug-in connector instead of screwed cable gland is integrateable on request.
Options	mounting arm adapter plate for mounting arm systems Rittal instead of Rolec
Further information	www.beckhoff.com/C9900-Exxx
Ordering information	Push-button extension for Panel PC CP77xx
C9900-E808	push-button extension for CP7721 with 12" display and numeric keyboard, 12 push-button keys with signal lamp
С9900-Е818	push-button extension for CP7731 with 12" display and alphanumeric keyboard, 16 push-button keys with signal lamp
C9900-E848	push-button extension for CP7702 with 15" display and without keyboard, 16 push-button keys with signal lamp
C9900-E858	push-button extension for CP7712 with 15" display and function keys, 16 push-button keys with signal lamp
C9900-E868	push-button extension for CP7722 with 15" display and numeric keyboard, 14 push-button keys with signal lamp
С9900-Е878	push-button extension for CP7732 with 15" display and alphanumeric keyboard, 18 push-button keys with signal lamp
C9900-E828	push-button extension for CP7703 with 19" display and without keyboard, 20 push-button keys with signal lamp
С9900-Е838	push-button extension for CP7713 with 19" display and function keys, 20 push-button keys with signal lamp
С9900-Е898	push-button extension for CP7723 with 19" display and numeric keyboard, 20 push-button keys with signal lamp
C9900-E899	push-button extension for CP7733 with 19" display and alphanumeric keyboard, 20 push-button keys with signal lamp
Ordering information	Push-button extension for Control Panel CP79xx
C9900-E708	push-button extension for CP7921 with 12" display and numeric keyboard, 12 push-button keys with signal lamp
C9900-E718	push-button extension for CP7931 with 12" display and alphanumeric keyboard, 16 push-button keys with signal lamp
С9900-Е748	push-button extension for CP7902 with 15" display and without keyboard, 16 push-button keys with signal lamp
С9900-Е758	push-button extension for CP7912 with 15" display and function keys, 16 push-button keys with signal lamp
C9900-E768	push-button extension for CP7922 with 15" display and numeric keyboard, 14 push-button keys with signal lamp
С9900-Е778	push-button extension for CP7932 with 15" display and alphanumeric keyboard, 18 push-button keys with signal lamp
C9900-E728	push-button extension for CP7903 with 19" display and without keyboard, 20 push-button keys with signal lamp
С9900-Е738	push-button extension for CP7913 with 19" display and function keys, 20 push-button keys with signal lamp
С9900-Е798	push-button extension for CP7923 with 19" display and numeric keyboard, 20 push-button keys with signal lamp
С9900-Е799	push-button extension for CP7933 with 19" display and alphanumeric keyboard, 20 push-button keys with signal lamp



PLC push-button extensions for tool machines

C9900-E78x	PLC push-button extension for tool machines at "Economy" built-in Panel PC, built-in Panel PC,
	built-in Control Panel, Panel PC and Control Panel
Features	push-button extension below
	16 push-button keys with signal lamp, type Siemens Signum square, 30 x 30 mm
	1 emergency stop key Siemens Signum
	inscription of the keys via slide-in labels
	All push-buttons are transmitted via USB with one normally-open contact.
	Additionally, all push-buttons are directly wireable with a second normally-open contact via a terminal row.
	All signal lamps are transmitted via USB only.
	1 graycode switch with 23 positions, controlled via USB
	2-port USB A interface in the front with screw cap IP 65
Additional features CP7942	mounting arm adapter plate at the Control Panel backplane for mounting arm installation from top or bottom
	for mounting arm system Rolec
Options	Circular plug-in connector instead of screwed cable gland is integrateable on request.
Additional options CP7942	mounting arm adapter plate for mounting arm system Rittal instead of Rolec
	mounting arm adapter plate for mounting arm system Rose instead of Rolec,
	with 2-port USB interface on the side with screw cap IP 65
Further information	www.beckhoff.com/C9900-Exxx

Ordering information	PLC push-button extension for CP6242, CP6542, CP6742-00xx-0040, CP6942, CP7242 and CP7942
C9900-E781	push-button extension for CP6242 with 15" display and alphanumeric keyboard
C9900-E780	push-button extension for CP6542 with 15" display and alphanumeric keyboard
C9900-E781	push-button extension for CP6742-00xx-0040 with 15" display and alphanumeric keyboard
C9900-E781	push-button extension for CP6942 with 15" display and alphanumeric keyboard
C9900-E784	push-button extension for CP7242 with 15" display and alphanumeric keyboard
C9900-E783	push-button extension for CP7942 with 15" display and alphanumeric keyboard



CNC push-button extensions for tool machines

C9900-E7xx	CNC push-button extension for tool machines at "Economy" built-in Panel PC, built-in Panel PC,
	built-in Control Panel, Panel PC and Control Panel
Features	push-button extension below
	2 push-button keys with signal lamp, type Siemens Signum round, directly wireable
	1 emergency stop key Siemens Signum
	1 key switch, type Siemens Signum round, directly wireable
	45 membrane keys with an LED in each key, controlled via USB
	inscription of the keys via slide-in labels
	1 graycode switch with 17 positions, controlled via USB
	1 graycode switch with 23 positions, controlled via USB
	circular plug-in connector
Additional features CP7942	mounting arm adapter plate at the Control Panel backplane for mounting arm installation from top or bottom
	for mounting arm system Rolec
Options CP7242	connection IP 65 for control unit Euchner at the bottom of the CNC push-button extension
Options CP7942	connection IP 65 for control unit Euchner at the bottom of the CNC push-button extension
	mounting arm adapter plate for mounting arm system Rittal instead of Rolec
	mounting arm adapter plate for mounting arm system Rose instead of Rolec,
	with 2-port USB interface on the side with screw cap IP 65
Further information	www.beckhoff.com/C9900-Exxx

Ordering information	CNC push-button extension for CP6242, CP6542, CP6742-00xx-0040, CP6942, CP7242 and CP7942	
С9900-Е787	push-button extension for CP6242 with 15" display and alphanumeric keyboard	
С9900-Е786	push-button extension for CP6542 with 15" display and alphanumeric keyboard	
С9900-Е787	push-button extension for CP6742-00xx-0040 with 15" display and alphanumeric keyboard	
С9900-Е787	push-button extension for CP6942 with 15" display and alphanumeric keyboard	
С9900-Е791	push-button extension for CP7242 with 15" display and alphanumeric keyboard	
С9900-Е789	push-button extension for CP7942 with 15" display and alphanumeric keyboard	

K7xxx, KT7xxx | Additional keyboard for CP7xxx Control Panels and Panel PCs

The indestructible PC keyboard

The K7xxx and KT7xxx PC keyboards add a keyboard to the Control Panel which allows the comfortable entry of large amounts of data with a keyboard designed for industrial use. The Control Panel keyboards K7xxx and KT7xxx are even more robust than a membrane keyboard and yet feel almost like a standard keyboard. They offer the optimum in operating comfort in tough industrial environments.

An aluminium keyboard housing in Control Panel design combines the keyboard and the Control Panel to form a homogeneous unit. The width of the housing is adapted to the Control Panel for which the keyboard is intended.

A touch pad can be integrated into the keyboard housing. Here, large, easily accessible keys meeting protection class IP 67 serve as mouse keys. The keyboards K7xxx and KT7xxx are mounted in a holder on the Control Panel which is available in a version located at a fixed angle of 100° and a version which can be adjusted between 90° and 180°. The Control Panel is modified to have additional open sections in the side contour which allow the cabling to be stored in an invisible way.



Ordering information	
K7100-0000	additional keyboard to be mounted to a Control Panel CP79xx or to a Panel PC CP72xx and CP77xx
KT7100-0000	additional keyboard with touch pad to be mounted to a Control Panel CP79xx or to a Panel PC CP72xx and CP77xx
С9900-М300	mounting adapter with fixed 100° angle for mounting a keyboard K7xxx or KT7xxx to a Control Panel
C9900-M310	mounting adapter with adjustable 90° to 180° angle for mounting a keyboard K7xxx or KT7xxx to a Control Panel

C9900-M400 | Keyboard shelf for CP7xxx Control Panels and Panel PCs

The keyboard shelf at a Beckhoff Control Panel permits a standard PC keyboard to be placed in front of the Control Panel, allowing convenient operation during commissioning or software updates. During normal production, the machine operator can rest tools and other items here while using the Control Panel.

The shelf is constructed from anodised aluminium. Its design matches that of the Control Panel. A ribbed rubber mat is glued to the surface of the shelf. The keyboard shelf is made as wide as the Control Panel. In the case of small Control Panels, the shelf is wider than the Control Panel housing, so that a keyboard can be rested on it. The Control Panel is given additional holes on the lower side, so the shelf should be ordered at the same time as the Control Panel.



Ordering information	
C9900-M400	toolboard for keyboard or tools, mounted under a Control Panel CP7xxx or Panel PCs CP7xxx
C9900-M401	drill holes at the bottom of a Control Panel or Panel PC CP7xxx for assembly of a keyboard shelf
	(supply without shelf)

C9900-T90x | Touch screen pen for CP6xxx, CP7xxx and C3xxx Control Panels and Panel PCs

The touch screen is the ideal operating medium for the Industrial PC. By using the Beckhoff touch screen pen, it is possible to make the touch screen technology available for tough operating environments and to allow higher operating precision than using the finger or another pointing medium.

The stable, round point of the pen allows easy, flowing operation of the touch screen and gives a better view of the display at the same time. It is also possible for operators who wear gloves to work in a precise and comfortable way with the Beckhoff touch screen pen. Grit or dirt on the finger is no longer a problem. The plastic tip is gentle on the surface of the touch screen. Direct operation without a pen still remains possible.

The user of the Beckhoff touch screen pen receives a precise input medium with an ergonomically formed, non-slip aluminium shaft, in a design which conforms to that of the Control Panel, and with the right balance of weight, form and friction. This pen is also ideal for the built-in Panel PCs with touch screen.

The touch screen pen is kept in a holder fastened to the Control Panel or to the Panel PC. A connecting cord between the pen and the holder makes the pen accessible at any time.



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Ordering information	
С9900-Т900	touch screen pen with holder for Control Panel and Panel PCs CP7xxx
С9900-Т902	touch screen pen with wall holder for built-in Control Panel and Panel PCs CP6xxx and C3xxx

C9900-E21x | RFID reader in the CP7xxx Control Panel front

The CP720x and CP770x Panel PCs and the CP790x Control Panels with 15- or 19-inch display without membrane keyboard are available with RFID reader in the front panel. The card reader enables user identification at the device. The RFID module reads Legic transponders at a distance of up to 30 mm. The data are transferred to the PC via USB. The RFID reader is integrated in the Control Panel or the Panel PC behind the front laminate. The print on the front laminate indicates the position of the RFID reader below the display on the right-hand side. IP 65 protection class is maintained and enables operation in harsh industrial environments. The RFID option has no influence on the dimensions of the Control Panel.



C9900-E21x	RFID reader
	Legic transponder type
	transponder frequency 13.56 MHz
	integrated in the Control Panel behind the front laminate
	up to 30 mm reading distance
	internally connected via USB interface
	IP 65

Ordering information	
C9900-E213	RFID reader for Legic transponder inside the front of a Panel PC CP7202 or CP7702 or of a Control Panel CP7902,
	integrated behind the front laminate, protection class IP 65, connected internally by USB
C9900-E214	RFID reader for Legic transponder inside the front of a Panel PC CP7203 or CP7703 or of a Control Panel CP7903,
	integrated behind the front laminate, protection class IP 65, connected internally by USB