# CP27xx-0010 | The fanless multi-touch built-in Panel PC





#### Product status: Regular delivery

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® under Windows 10 IoT Enterprise.

# Scalable performance

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.

### Highest data availability and data security

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.

#### Accessibility of the components

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



#### Central EtherCAT control

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.

## Flexible expansion options

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

### Advantage at the very core: the Beckhoff Industrial PCs

Beckhoff is a pioneer in PC-based automation technology and has been developing and producing its own PC hardware since 1986. The technology know-how that has grown over the past decades is incorporated today into all Beckhoff Industrial PCs. Their principle feature is the use of state-of-the-art components and processors of the highest performance class. Combined with a high in-house production depth, including proprietary motherboard production, long-term component availability, extremely flexible configuration and customer-specific adaptations, Beckhoff presents itself today as one of the world's leading Industrial PC manufacturers.

## **Product information**

#### **Technical Data**

Technical data	CP27xx-0010	Options
Device type	Fanless multi-touch built-in Panel PC	
Housing	aluminium housing with glass front	stainless steel housing with glass front at 12.1", 15.6", 18.5" and 21.5" display
Slots for hard disk/flash	2 slots for CFast	
Installation	pull-out clamping levers for fast installation without loose parts	
Protection class	front side IP 65, rear side IP 20	
Operating temperature	055 °C	
Display size/resolution	12" 800 x 600, 12.1" 1280 x 800, 15" 1024 x 768, 15.6" 1366 x 768, 18.5" 1366 x 768, 19" 1280 x 1024, 21.5" 1920 x 1080 or 24" 1920 x 1080	
Touch screen	multi-finger touch screen	
Processor	Intel Atom® E3815, 1.46 GHz, 1 core (TC3: 40)	up to Intel Atom® E3845 1.91 GHz, 4 cores (TC3: 50)
Motherboard	3½-inch motherboard for Intel Atom® E38xx	
PCIe/PCI slots	-	1 PCIe module slot
Memory	2 GB DDR3L RAM	up to 8 GB DDR3L RAM ex factory
Ethernet	2 x 100/1000BASE-T on-board	1 additional 100/1000BASE-T
Hard disks/flash	20 GB CFast	up to 160 GB CFast
Interfaces	4 x USB 2.0, 1 x DVI	1 x USB in the front
Power supply	24 V DC	UPS



Operating system Windows Embedded Compact 7, English	Windows 7, Windows Embedded Standard 7, Windows 10 IoT Enterprise
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# **Ordering Information**

CP27xx-0010	Fanless multi-touch built-in Panel PC
CP2712-0010	12-inch display 800 x 600, multi-finger touch screen
CP2713-0010	12.1-inch display 1280 x 800, multi-finger touch screen
CP2715-0010	15-inch display 1024 x 768, multi-finger touch screen
CP2716-0010	15.6-inch display 1366 x 768, multi-finger touch screen
CP2718-0010	18.5-inch display 1366 x 768, multi-finger touch screen
CP2719-0010	19-inch display 1280 x 1024, multi-finger touch screen
CP2721-0010	21.5-inch display 1920 x 1080, multi-finger touch screen
CP2724-0010	24-inch display 1920 x 1080, multi-finger touch screen

# Options

Options	CP27xx-0010
C9900-E268	1-port USB socket inside the front of a CP2xxx without push-button extension, USB-A socket IP 65
C9900-F942	stainless steel front with blue silicone seal for CP2x13-00x0 for horizontal alignment, stainless steel 1.4404, matt ground with grain size 240, instead of standard aluminium front
C9900-F945	stainless steel front with blue silicone seal for CP2x16-00x0 for horizontal alignment, stainless steel 1.4404, matt ground with grain size 240, instead of standard aluminium front
C9900-F946	stainless steel front with blue silicone seal for CP2x18-00x0 for horizontal alignment, stainless steel 1.4404, matt ground with grain size 240, instead of standard aluminium front
C9900-F948	stainless steel front with blue silicone seal for CP2x21-00x0 for horizontal alignment, stainless steel 1.4404, matt ground with grain size 240, instead of standard aluminium front
C9900-C572	processor Intel Atom® E3827, 1.75 GHz, 2 cores (TC3: 40), instead of Intel Atom® E3815, 1.46 GHz (TC3: 40).  With Windows Embedded Compact 7 only one core is supported. Multicore support is available with Windows Embedded Standard 7, Windows 7 Professional, Windows 7 Ultimate and Windows 10 IoT Enterprise.
C9900-C573	processor Intel Atom® E3845, 1.91 GHz, 4 cores (TC3: 50), instead of Intel Atom® E3815, 1.46 GHz (TC3: 40).  With Windows Embedded Compact 7 only one core is supported. Multicore support is available with Windows Embedded Standard 7, Windows 7 Professional, Windows 7 Ultimate and Windows 10 IoT Enterprise.
C9900-R257	memory extension to 4 GB DDR3L RAM, instead of 2 GB, requires a 64 bit operating system or only 3 GB are addressable
C9900-R258	memory extension to 8 GB DDR3L RAM, instead of 2 GB, requires a 64 bit operating system



C9900-B415	third on-board Ethernet adapter on the 3½-inch motherboard for Intel Atom® or Intel® Celeron® ULV 827E 1.4 GHz, wired out with a 100/1000BASE-T connector inside the connector bracket at the connection section
C9900-B518	1 PCIe module slot integrated inside CP27xx, to plug-in Beckhoff PCIe modules, instead of 1 connector bracket to lead out interfaces
C9900-E233	1 serial port RS232 of the motherboard led out at the connection section of a C5210, C65x5, CP2xxx, CP62xx or CP67xx-xxxx-0040/-0050
C9900-E234	2 USB ports of the motherboard led out at the connection section of a C5210, C65x5, CP2xxx, CP62xx or CP67xx-xxxx-0040/-0050
C9900-E240	Serial port COM2 RS232, optically linked, overload protection, D-sub 9-pin connector.
C9900-E241	Serial port COM2 RS485, optically linked, overload protection, D-sub 9-pin connector. Configuration as an end point without echo: echo off, auto send on, always send off, auto receive on, always receive off, termination on
C9900-E242	Serial port COM2 RS422, optically linked, overload protection, D-sub 9-pin connector. Configuration as a full duplex end point: echo on, auto send off, always send on, auto receive off, always receive on, termination on
C9900-Z411	adapter plug DVI-I to VGA
C9900-Z413	adapter cable DVI-I to DVI and VGA, 15 cm
C9900-H583	40 GB CFast card, 3D flash, extended temperature range
C9900-H587	80 GB CFast card, 3D flash, extended temperature range
C9900-H624	160 GB CFast card, 3D flash, extended temperature range
C9900-H586	40 GB CFast card, 3D flash, extended temperature range, instead of 20 GB CFast card
C9900-H590	80 GB CFast card, 3D flash, extended temperature range, instead of 20 GB CFast card
С9900-Н627	160 GB CFast card, 3D flash, extended temperature range, instead of 20 GB CFast card
C9900-U209	uninterruptible power supply UPS, integrated into the 24 V power supply, without battery
C9900-U330	battery pack for PCs with 24 V power supply and integrated UPS C9900-P209 or C9900-U209, external, for DIN rail mounting, 3.4 Ah, operating temperature 050 °C, contains two rechargeable, sealed lead batteries VRLA-AGM
C9900-U332-0010	battery pack for 24 V power supply with integrated UPS C9900-U209 at PCs with Intel Atom® or Celeron® ULV 827E 1.4 GHz processor, external, for DIN rail mounting, 1.2 Ah, operating temperature 050 °C, contains two rechargeable, sealed lead batteries VRLA-AGM
C9900-S706	TwinCAT 2 PLC runtime for Windows Embedded Compact 7
C9900-S707	TwinCAT 2 NC PTP runtime for Windows Embedded Compact 7
C9900-S708	TwinCAT 2 NC I runtime for Windows Embedded Compact 7

CP27xx-0010	Options for CP27xx with 1 module slot C9900-B518
FC9062	Gigabit Ethernet PCIe module for PCs with Beckhoff PCIe module slots, 2-channel, PCI Express x1 bus
C9900-E301	RS232 PCIe module for PCs with Beckhoff PCIe module slots, 2-channel, optically linked, 2 sockets ix industrial™ type B. Requires 2 adapter cables C9900-K920 ix industrial™ type B to D-Sub, 9 pin.
C9900-K920	adapter cable ix Industrial® type B to D-sub, 9-pin, for RS232 PCIe module C9900-E301 or C9900-E306, length 45 cm



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C9900-E309	RS485 PCIe module for PCs with Beckhoff PCIe module slots, 2-channel, optically linked, 2 sockets ix industrial™ type B.  Configuration as an end point without echo: echo off, auto send on, always send off, auto receive on, always receive off, termination on. Requires 2 adapter cables C9900-K922 ix industrial™ type B to D-sub, 9 pin.
C9900-E310	RS422 PCIe module for PCs with Beckhoff PCIe module slots, 2-channel, optically linked, 2 sockets ix industrial™ type B.  Configuration as a full duplex end point: echo on, auto send off, always send on, auto receive off, always receive on, termination on.  Requires 2 adapter cables C9900-K922 ix industrial™ type B to D-sub, 9 pin.
C9900-K922	adapter cable ix industrial™ type B to D-sub, 9 pin, for RS422/RS485 PCIe module C9900-E309, C9900-E310, C9900-E312 or C9900-E313, length 45 cm
C9900-E277	USB 3.0 PCIe module - 2-port USB 3.0 interfaces - USB transfer rate up to 5 Gbit/s for USB 3.0 - compatible to all USB standards - delivers up to 1 A supply current at each USB port