CP27xx-0000 | The fanless multi-touch built-in Panel PC



Product status: Regular delivery (not recommended for new projects)

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-0000	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	0...55 °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® Celeron® ULV 827E 1.4 GHz, 1 core (TC3: 50)	
Motherboard	3½-inch motherboard for Intel® Celeron® ULV 827E	
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

Ordering Information

CP27xx-0000	Fanless multi-touch built-in Panel PC
CP2712-0000	12-inch display 800 x 600, Display only, multi-finger touch screen
CP2715-0000	15-inch display 1024 x 768, Display only, multi-finger touch screen
CP2716-0000	15.6-inch display 1366 x 768, Display only, multi-finger touch screen
CP2718-0000	18.5-inch display 1366 x 768, Display only, multi-finger touch screen
CP2719-0000	19-inch display 1280 x 1024, Display only, multi-finger touch screen
CP2721-0000	21.5-inch display 1920 x 1080, Display only, multi-finger touch screen
CP2724-0000	24-inch display 1920 x 1080, Display only, multi-finger touch screen

Options

Options	CP27xx-0000
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-R249	memory extension to 4 GB DDR3 RAM, instead of 2 GB, requires a 64 bit operating system or only 3 GB are addressable
C9900-R250	memory extension to 8 GB DDR3 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
C9900-H627	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 0...50 °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 0...50 °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-0000	**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-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