CP22xx-0010 | Multi-touch built-in Panel PC



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

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.

Scalable performance

CP22xx Panel PCs are equipped with Intel® Celeron®, Pentium® or Core™ i3/i5/i7 processors and have 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.

Highest data availability and data security

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.

Accessibility of the components

Data media, the fan and the lithium battery of the system clock are accessible from the rear under the fan cover.

Central EtherCAT control

Due to its two independent Ethernet interfaces the CP22xx is ideally suited as a compact central processing unit for an EtherCAT control system.

Flexible expansion options

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 fail-safe data storage can also be plugged as PCIe module.

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	CP22xx-0010	Options
Device type	Multi-touch built-in Panel PC	
Housing	aluminium housing with glass front	stainless steel housing with glass front at 15.6", 18.5" and 21.5" display
Slots for hard disk/flash	1 slot for 2½-inch hard disk/SSD, 1 slot for CFast	2 slots for CFast or 2 slots for 2½-inch hard disk/SSD
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® 2000E 2.2 GHz, 2 cores (TC3: 50)	up to Intel® Core™ i7-4700EQ 2.4 GHz, 4 cores (TC3: 80)
Motherboard	3½-inch motherboard for 4th generation Intel® Celeron®, Core™ i3/i5/i7	
PCIe/PCI slots	–	2 PCIe module slots
Memory	2 GB DDR3L RAM	up to 16 GB DDR3L RAM
Graphic adapter	integrated in the processor	
Ethernet	2 x 100/1000BASE-T on-board	

RAID	on-board SATA RAID 1 controller	
Hard disks/flash	hard disk, 2½-inch, 320 GB	SSD, CFast
Interfaces	2 x USB 3.0, 2 x USB 2.0, 1 x RS232, 1 x DVI	1 x USB in the front
Power supply	24 V DC	UPS
Operating system	–	Windows 7, Windows Embedded Standard 7, Windows 10 IoT Enterprise

Ordering Information

CP22xx-0010	Multi-touch built-in Panel PC
CP2212-0010	12-inch display 800 x 600, multi-finger touch screen
CP2213-0010	12.1-inch display 1280 x 800, multi-finger touch screen
CP2215-0010	15-inch display 1024 x 768, multi-finger touch screen
CP2216-0010	15.6-inch display 1366 x 768, multi-finger touch screen
CP2218-0010	18.5-inch display 1366 x 768, multi-finger touch screen
CP2219-0010	19-inch display 1280 x 1024, multi-finger touch screen
CP2221-0010	21.5-inch display 1920 x 1080, multi-finger touch screen
CP2224-0010	24-inch display 1920 x 1080, multi-finger touch screen

Options

Options	CP22xx-0010
C9900-M575	vertical orientation of the display inside the Control Panel or Panel PC CP22xx, CP26xx, CP29xx or CP39xx instead of standard Control Panel or standard Panel PC
C9900-E268	1-port USB socket inside the front of a CP2xxx without push-button extension, USB-A socket IP 65
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-C562	processor 4th generation Intel® Core™ i3 4100E, 2.4 GHz, 2 cores (TC3: 60), instead of Intel® Celeron® 2000E 2.2 GHz (TC3: 50)
C9900-C570	processor 4th generation Intel® Core™ i3 4110E, 2.6 GHz, 2 cores (TC3: 60), instead of Intel® Celeron® 2000E 2.2 GHz (TC3: 50)
C9900-C563	processor 4th generation Intel® Core™ i5 4400E, 2.7 GHz, 2 cores (TC3: 70), instead of Intel® Celeron® 2000E 2.2 GHz (TC3: 50)
C9900-C571	processor 4th generation Intel® Core™ i5 4410E, 2.9 GHz, 2 cores (TC3: 70), instead of Intel® Celeron® 2000E 2.2 GHz (TC3: 50)

C9900-C564	processor 4th generation Intel® Core™ i7 4700EQ, 2.4 GHz, 4 cores (TC3: 80), instead of Intel® Celeron® 2000E 2.2 GHz (TC3: 50)
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-R259	memory extension to 16 GB DDR3L RAM, instead of 2 GB, requires a 64 bit operating system
C9900-B517	2 PCIe module slots integrated inside CP22xx, to plug-in Beckhoff PCIe modules, instead of 2 connector brackets 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
FC9071	Gigabit Ethernet PC interface card, 10/100/1000 Mbit/s, 1-channel, PCIe interface, occupies the fieldbus connection area.
C9900-R230	memory module NOVRAM for fail-safe storage of process data, 128 kB, Mini PCI plug-in card
C9900-R231	memory module NOVRAM for fail-safe storage of process data, 256 kB, Mini PCI plug-in card
C9900-R232	memory module NOVRAM for fail-safe storage of process data, 512 kB, Mini PCI plug-in card
C9900-D191	PC with 2 slots for 2½-inch hard disks or SSDs, instead of 1 slot for a hard disk or SSD and 1 slot for CFast
C9900-H145	additional hard disk, 2½-inch, 320 GB
C9900-H749	solid-state disk SSD, 3D flash, 2½-inch, 240 GB
C9900-H745	solid-state disk SSD, 3D flash, 2½-inch, 480 GB
C9900-H759	solid-state disk SSD, 3D flash, 2½-inch, 960 GB
C9900-H750	solid-state disk SSD, 3D flash, 2½-inch, 240 GB, instead of 2½-inch hard disk
C9900-H746	solid-state disk SSD, 3D flash, 2½-inch, 480 GB, instead of 2½-inch hard disk
C9900-H760	solid-state disk SSD, 3D flash, 2½-inch, 960 GB, instead of 2½-inch hard disk
C9900-D190	2 slots for CFast cards, instead of 1 slot for a 2½-inch hard disk or SSD and 1 slot for CFast
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-H584	40 GB CFast card, 3D flash, extended temperature range, instead of 2½-inch hard disk
C9900-H588	80 GB CFast card, 3D flash, extended temperature range, instead of 2½-inch hard disk
C9900-H625	160 GB CFast card, 3D flash, extended temperature range, instead of 2½-inch hard disk
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

CP22xx-0010	**Options for CP22xx with 2 module slots C9900-B517**
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