



## CP22xx-0020 | Multi-touch built-in Panel PC



**i Product status:** Regular delivery

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-0020	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® G3900TE 2.3 GHz, 2 cores (TC3: 50)	up to Intel® Core™ i7 7700(T) 2.9 GHz, 4 cores (TC3: 80)
Motherboard	3½-inch motherboard for 6th/7th generation Intel® Celeron®, Pentium®, Core™ i3/i5/i7	
PCIe/PCI slots	–	2 PCIe module slots
Memory	4 GB DDR4 RAM	up to 32 GB DDR4 RAM
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	4 x USB 3.0, 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, Windows Server 2016

## Ordering Information

CP22xx-0020	Multi-touch built-in Panel PC
CP2212-0020	12-inch display 800 x 600, multi-finger touch screen
CP2213-0020	12.1-inch display 1280 x 800, multi-finger touch screen
CP2215-0020	15-inch display 1024 x 768, multi-finger touch screen
CP2216-0020	15.6-inch display 1366 x 768, multi-finger touch screen
CP2218-0020	18.5-inch display 1366 x 768, multi-finger touch screen
CP2219-0020	19-inch display 1280 x 1024, multi-finger touch screen
CP2221-0020	21.5-inch display 1920 x 1080, multi-finger touch screen
CP2224-0020	24-inch display 1920 x 1080, multi-finger touch screen

## Options

Options	CP22xx-0020
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-E308	Serial port RS232, optically linked, D-sub 9-pin connector, PCIe-Interface, occupies the fieldbus connecting area.
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-C607	processor 6th generation Intel® Pentium® G4400TE, 2.4 GHz, 2 cores (TC3: 50), instead of Intel® Celeron® G3900TE 2.3 GHz (TC3: 50)
C9900-C608	processor 6th generation Intel® Core™ i3-6100TE, 2.7 GHz, 2 cores (TC3: 60), instead of Intel® Celeron® G3900TE 2.3 GHz (TC3: 50)
C9900-C618	processor 7th generation Intel® Core™ i3-7101(T)E, 3.4 GHz, 2 cores (TC3: 60), requires Windows 10, 64 bit or Windows Server 2016, instead of Intel® Celeron® G3900TE 2.3 GHz (TC3: 50)

C9900-C609	processor 6th generation Intel® Core™ i5-6500TE, 2.3 GHz, 4 cores (TC3: 70), instead of Intel® Celeron® G3900TE 2.3 GHz (TC3: 50)
C9900-C619	processor 7th generation Intel® Core™ i5-7500(T), 2.7 GHz, 4 cores (TC3: 70), requires Windows 10, 64 bit or Windows Server 2016, instead of Intel® Celeron® G3900TE 2.3 GHz (TC3: 50)
C9900-C610	processor 6th generation Intel® Core™ i7-6700TE, 2.4 GHz, 4 cores (TC3: 80), instead of Intel® Celeron® G3900TE 2.3 GHz (TC3: 50)
C9900-C620	processor 7th generation Intel® Core™ i7-7700(T), 2.9 GHz, 4 cores (TC3: 80), requires Windows 10, 64 bit or Windows Server 2016, instead of Intel® Celeron® G3900TE 2.3 GHz (TC3: 50)
C9900-R270	memory extension to 8 GB DDR4 RAM, instead of 4 GB
C9900-R271	memory extension to 16 GB DDR4 RAM, instead of 4 GB
C9900-R272	memory extension to 32 GB DDR4 RAM, instead of 4 GB
C9900-B517	2 PCIe module slots integrated inside CP22xx, to plug-in Beckhoff PCIe modules, instead of 2 connector brackets to lead out interfaces
FC9071	Gigabit Ethernet PC interface card, 10/100/1000 Mbit/s, 1-channel, PCIe interface, occupies the fieldbus connection area.
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