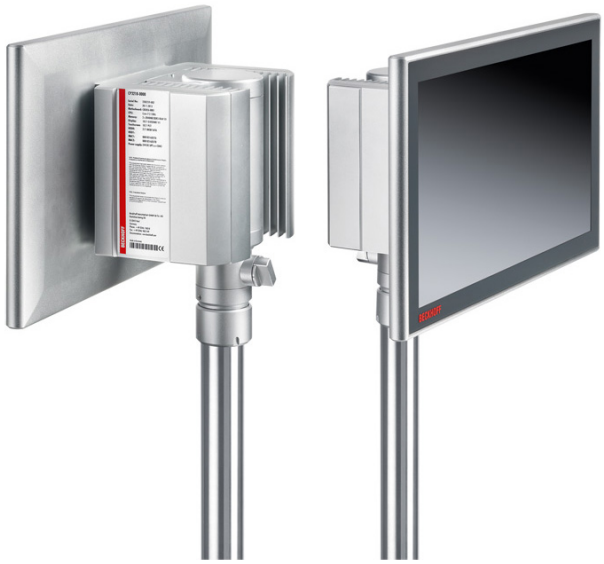
CP32xx-0010 | “Economy” Panel PC



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

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®, Pentium® 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, 5:4 or widescreen 16:9 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.

Direct mounting arm installation

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.

Scalable performance

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 fieldbus or USB. Prefabricated cables in various lengths are available for all connections.

Highest data availability and data security

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.

Accessibility of the components

The data media and the lithium battery of the system clock are accessible from the rear under the cover.

Flexible expansion options

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

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	CP32xx-0010	Options
Device type	Multi-touch Panel PC	
Housing	aluminium housing for mounting arm installation	
Mounting arm adapter	rotatable and tiltable mounting arm adapter for Rittal and Rolec mounting arm systems with 48 mm tube from top	from bottom
Wiring area	for up to 6 IP 65 connectors, 4 of these are free	
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
Cooling	passive through heat sink structure, internal fan for equal heat distribution to all housing walls	
Free space for air circulation	20 cm (7.9") around the PC required	
Protection class	IP 65	
Operating temperature	0...45 °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	–	1 PCIe module slot
Memory	2 GB DDR3L RAM	up to 16 GB DDR3L 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	1 x Ethernet 100/1000BASE-T Harting PushPull	
Power supply	24 V DC	UPS
Operating system	–	Windows 7, Windows Embedded Standard 7, Windows 10 IoT Enterprise

Ordering Information

CP32xx-0010	Multi-touch Panel PCs
CP3212-0010	12-inch display 800 x 600, multi-finger touch screen
CP3215-0010	15-inch display 1024 x 768, multi-finger touch screen
CP3216-0010	15.6-inch display 1366 x 768, multi-finger touch screen
CP3218-0010	18.5-inch display 1366 x 768, multi-finger touch screen
CP3219-0010	19-inch display 1280 x 1024, multi-finger touch screen
CP3221-0010	21.5-inch display 1920 x 1080, multi-finger touch screen
CP3224-0010	24-inch display 1920 x 1080, multi-finger touch screen

Options

Options	CP37xx-0020
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-B519	1 PCIe module slot integrated inside CP32xx or CP37xx, to plug-in Beckhoff PCIe modules
C9900-E282	2 IP 65 connectors in the wiring area of a CP32xx, led out with PCIe module FC9062. 2 gigabit Ethernet interfaces. Harting push-pull Ethernet sockets. Requires a PCIe module slot C9900-B519
C9900-M184	mounting arm adapter for Panel PC CP32xx or CP37xx, for Rittal and Rolec mounting arm systems with 48 mm tube from bottom instead of from top
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-E185	IP 65 connector in the wiring area of a CP32xx, CP37xx, CPX37xx or CP72xx for the second on-board Ethernet adapter, Harting push-pull Ethernet socket
C9900-E186	IP 65 connector M12 in the wiring area of a CP32xx, CP37xx or CP72xx for one serial interface RS232
C9900-E248	IP 65 connector M12 in the wiring area of a CP32xx, CP37xx or CP72xx for one serial interface RS422, optically linked, overload protection. Configuration as a full duplex end point: echo on, auto send off, always send on, auto receive off, always receive on, termination on
C9900-E261	IP 65 connector M12 in the wiring area of a CP32xx, CP37xx or CP72xx for one serial interface RS485, optically linked, overload protection. Configuration as an end point without echo: echo off, auto send on, always send off, auto receive on, always receive off, termination on
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

Options	To connect a keyboard to the PC, e.g. at commissioning, one of the following USB sockets is required:
C9900-E279	1-port USB 3.0 connector with IP 65 screw cap in the sidewall of the CP32xx or CP37xx from version -0010
C9900-E283	IP 65 connector in the wiring area of a CP32xx, CP37xx or CP72xx for a USB 3.0 port, Harting push-pull USB 3.0 socket
C9900-E187	IP 65 connector M12 in the wiring area of a CP32xx, CP37xx or CP72xx for one USB 2.0 port
C9900-E190	USB-A in the wiring area of a CP32xx, CP37xx or CP72xx for one USB 2.0 port, including covering cap IP 65
C9900-E304	USB A socket in the wiring area of a CP32xx or CP37xx for one USB 3.0 port, including covering cap IP 65

Accessories

Accessories	
C9900-K271	power supply cable IP 65 for CP32xx, CP37xx or CP72xx, length 5 m, assembled, M23 connector, screw type, 8 wires, second end open
C9900-K275	power supply cable IP 65 for CP32xx and CP37xx or CP72xx, length 5 m, 12 wires: 24 V plus, 24 V minus, battery plus and battery minus each 2 x 1 mm² for low voltage drop, assembled, M23 connector, screw type, second end open
C9900-K272	power supply cable IP 65 for CP32xx, CP37xx or CP72xx, length 10 m, assembled, M23 connector, screw type, 8 wires, second end open
C9900-K276	power supply cable IP 65 for CP32xx, CP37xx or CP72xx, length 10 m, 12 wires: 24 V plus, 24 V minus, battery plus and battery minus each 2 x 1 mm² for low voltage drop, assembled, M23 connector, screw type, second end open
C9900-K277	power supply cable IP 65 for CP32xx, CP37xx or CP72xx, length 20 m, 12 wires: 24 V plus, 24 V minus, battery plus and battery minus each 2 x 1 mm² for low voltage drop, assembled, M23 connector, screw type, second end open
C9900-K281	network cable for CP32xx, CP37xx, CPX37xx and CP72xx, length 3 m, assembled, Harting push-pull Ethernet connector IP 65, second end RJ45, IP 20
C9900-K282	network cable for CP32xx, CP37xx, CPX37xx and CP72xx, length 5 m, assembled, Harting push-pull Ethernet connector IP 65, second end RJ45, IP 20
C9900-K283	network cable for CP32xx, CP37xx, CPX37xx and CP72xx, length 10 m, assembled, Harting push-pull Ethernet connector IP 65, second end RJ45, IP 20
C9900-K284	network cable for CP32xx, CP37xx, CPX37xx and CP72xx, length 15 m, assembled, Harting push-pull Ethernet connector IP 65, second end RJ45, IP 20
C9900-K285	network cable for CP32xx, CP37xx, CPX37xx and CP72xx, length 20 m, assembled, Harting push-pull Ethernet connector IP 65, second end RJ45, IP 20
C9900-K286	network cable for CP32xx, CP37xx, CPX37xx and CP72xx, length 30 m, assembled, Harting push-pull Ethernet connector IP 65, second end RJ45, IP 20
C9900-K287	network cable for CP32xx, CP37xx, CPX37xx and CP72xx, length 40 m, assembled, Harting push-pull Ethernet connector IP 65, second end RJ45, IP 20
C9900-K288	network cable for CP32xx, CP37xx, CPX37xx and CP72xx, length 50 m, assembled, Harting push-pull Ethernet connector IP 65, second end RJ45, IP 20

C9900-K291	USB 2.0 cable for CP32xx, CP37xx or CP72xx, length 3 m, assembled, M12 connector IP 65, screw type, 4-pin, second end USB B connector
C9900-K292	USB 2.0 cable for CP32xx, CP37xx or CP72xx, length 5 m, assembled, M12 connector IP 65, screw type, 4-pin, second end USB B connector
C9900-K306	USB 3.0 cable for CP32xx, CP37xx or CP72xx, length 3 m, assembled, Harting push-pull USB 3.0 connector IP 65, second end USB-B connector IP 20
C9900-K295	serial interface cable RS232 for CP32xx, CP37xx or CP72xx, length 3 m, assembled, M12 connector IP 65, screw type, 12-pin, second end D-sub, 9-pin plug
C9900-K296	serial interface cable RS232 for CP32xx, CP37xx or CP72xx, length 5 m, assembled, M12 connector IP 65, screw type, 12-pin, second end D-sub, 9-pin plug
C9900-K297	serial interface cable RS232 for CP32xx, CP37xx or CP72xx, length 10 m, assembled, M12 connector IP 65, screw type, 12-pin, second end D-sub, 9-pin plug