



Compact CP72xx Panel PC with IP 65 protection



# The intelligent, "all-in-one" Panel PC

→ With the new CP72xx Panel PC Beckhoff extends the successful "Economy" range with a high-performance Panel PC for mounting arm installation. In addition to Control Panels, Panel PCs and Industrial PCs for control cabinet installation, "Economy" users now also have a compact, powerful and price-optimized PC controller for direct machine installation.

A modern machine controller must meet a wide range of requirements. It should offer high performance and be compact, flexible and cost-effective, without neglecting the typical basic industrial requirements such as robustness and long-term availability. If the controller also has to be integrated directly in the operator terminal, which can be installed wherever it is required – i.e. independent of the control cabinet – the question arises as to how all these requirements can be met in a single device.

With the new CP72xx Panel PC, Beckhoff offers a mounting arm Industrial PC that was specially developed for these requirements. The new CP72xx features all-

around IP 65 protection and an integrated mounting arm adapter for demanding application directly at the machine. The attractive aluminum case in its slimline design, with a 3 1/2" motherboard from Beckhoff with Intel® Celeron® M oder Pentium® M processor, features high-performance components and, with a housing depth of only 94 mm, offers uniquely compact dimensions for this performance class. During the second half of the year, this performance will be enhanced even further with the introduction of new Beckhoff motherboards with Intel® Core™ Duo architecture.

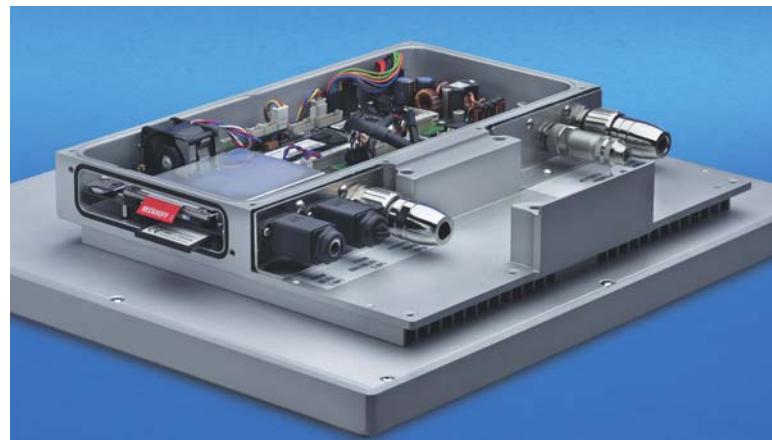


special functions can be integrated. With its optional push-button extensions, the CP72xx replaces the operator control panel of the machine and becomes a dynamic, multi-functional command center.

The add-on PC integrated at the rear of the Control Panel comes with a 1.5 GHz Intel® Celeron® M processor and can optionally be equipped with Intel® Pentium® M processors up to 1.8 GHz – and in the future even with Intel® Core™ Duo or Core™2 Duo processors up to 2.16 GHz. 256 MB of DDR RAM are available as standard. For demanding applications, the RAM can be extended up to 2 GB.

#### Innovative housing design

The new Panel PC, which can be operated at ambient temperatures up to 45 °C, is cooled via cooling fins located between the Control Panel and the add-on PC. A fan inside the enclosed housing ensures that the heat is distributed evenly. The case features an integrated, rotating and swiveling mounting arm adapter that enables suspended mounting or installation on a stand. The CP72xx connection cables are routed directly through the mounting arm.

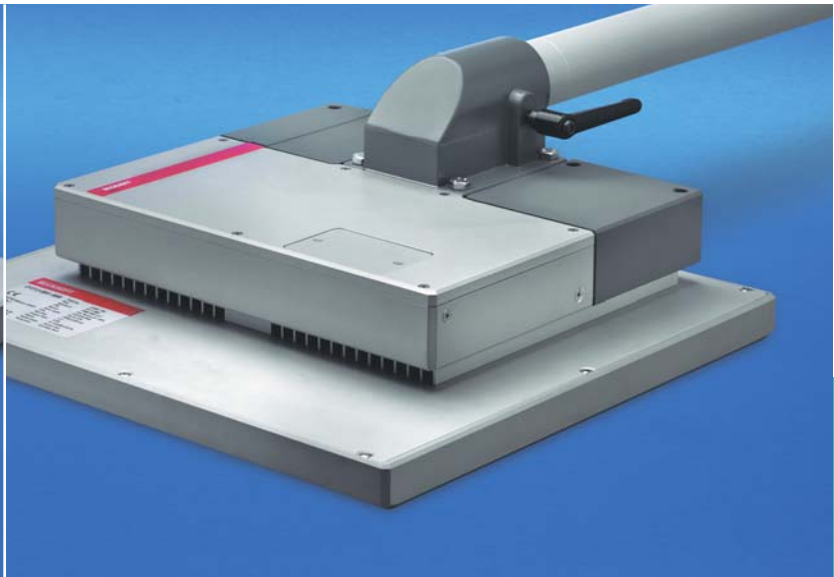
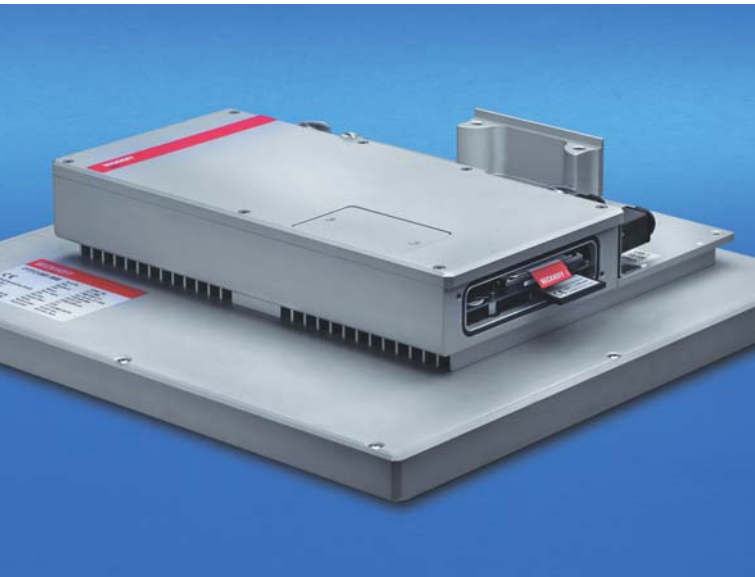


#### Advanced performance in temperature-resistant housing

The new CP72xx Panel PC features a motherboard developed by Beckhoff that was optimized for the specific requirements of advanced machine control. The optimized form factor enables a slimline PC housing. All temperature-relevant components of motherboards are located on one side – the same applies to the power supply. This means that all components can be positioned directly at the cooling fins. Through clever arrangement of the cooling fins, the add-on PC has a very low depth of only 65 mm. The housing of the new Panel PC offers all-round IP 65 protection and can be operated at ambient temperatures up to 45 °C.

#### The right front for each application

The CP72xx Panel PC consists of a Control Panel and an integrated, high-performance Industrial PC. The large variety of Control Panels alone results in 38 variants of the new IP 65 Panel PC. The CP72xx can be supplied with 12", 15" or 19" TFT displays, optionally with touch screen or touch pad. A wide range of front designs are available, including simple displays without keys, front panels with function keys or numeric keyboard, or full alphanumeric keyboard including special PLC keys. Customized front membranes can also be provided. The appearance of the Panel PC can be adapted to the customer's corporate design or further



## User-friendly Panel PC

The housing of the new CP72xx Panel PC was designed with clear structure and operation- and maintenance-friendly configuration in mind. The integrated, speed-controlled fan is easily accessible and removable from outside via a detachable plate. Compact Flash cards, hard disks and the battery can also be accessed easily in the same way. Mounting arm installation is straightforward: The CP72xx can be installed at the mounting arm unwired – the rotating and swiveling mounting arm adapter enables suspended installation or installation on a stand. Once the device is safely mounted, the cables are routed through the mounting arm. The cables are connected with the Panel PC via waterproof IP 65 connectors. All terminals are located in a spacious wiring space so that the CP72xx allows convenient and application-oriented commissioning.

The Industrial PC connections (up to six) with IP 65 connectors are positioned in the large wiring space and are easily accessible. The connection section can be opened quickly without having to remove the device from the mounting arm. Due to its two independent Ethernet interfaces the CP72xx is ideally suited as a compact central processing unit for an EtherCAT control system. A Gigabit port is available for the connection to the higher-level network.

The CP72xx series Panel PCs are supplied with a 24 V DC power supply unit, optionally with integrated uninterruptible power supply (UPS) and an external battery pack. In its basic configuration the Panel PC is offered with Windows CE. With a larger Compact Flash card Windows XP Embedded can be installed as an option and with a hard disk Windows XP Professional can be installed. With the introduction of the new Intel® Core™ Duo processor generation the new Windows Vista operating system is available on request.

### Straightforward integration of conventional fieldbuses

The CP72xx features a free Mini PCI slot. If the free slot is used for a Beckhoff Mini PCI fieldbus card, the CP72xx becomes a high-performance master for conventional fieldbus systems such as PROFIBUS, CANopen or DeviceNet. As a further option, a Mini PCI fieldbus card with a third Ethernet port can be used. In this way, it is even possible to create a redundant EtherCAT configuration. With EtherCAT as a fast higher-level network, existing fieldbus structures can be integrated as sub-bus.

The optional plug-in card with NOVRAM offers a further option for utilizing the free Mini PCI slot. With this card the user has up to 512 KB of fail-safe data storage available.

The new CP72xx Panel PC meets all requirements for advanced machine control. Through its intelligent housing construction and the innovative motherboard design, the CP72xx enters a new performance class for this form factor.



## High-end CPU technology

In its basic configuration, the new CP72xx Panel PC features a 1.5 GHz Intel® Celeron® M processor. If required the Panel PC can be equipped with Intel® Pentium® M technology up to 1.8 GHz. Together with the 855 chipset and the ICH4 south bridge, the CP72xx offers excellent performance characteristics.

During the second half of 2007, an ultra-high-speed control version of the CP72xx will be released: Through the introduction of Intel® Core™ Duo- und Core™ 2 Duo processors in combination with a 945 chipset and an ICH7R south bridge with RAID, the CP72xx will achieve even better performance. TwinCAT, the automation software from Beckhoff, already supports the multicore technology of the new Intel® processor generation and ensures full utilization of the available processing capacity.