C6525 | Fanless built-in Industrial PC



Product status: Regular delivery

The C65xx Industrial PC series is designed to be installed in the panels of the control cabinet or in the rear panel of a control housing or console housing. The heat sink of the Industrial PC is fed to the outside through a suitable cut-out in the control cabinet or housing panel. Power dissipation from the processor and chipset takes place directly to ambient. Integrated seals provide for an IP 65 closure. This enables high thermal stability and at the same time fanless operation. Industrial PCs of type C65xx can hence be constructed completely without rotating parts.

Industrial design

If the C65xx Built-in PC is combined with a Beckhoff Control Panel, the result is a fanless Panel PC that enables operation up to an ambient temperature of 45°C. The compact housing is equipped with a 3½-inch motherboard for Intel® Celeron® or Core™ i3/i5/i7 of the latest generation. All of the PC's connectors are located on the top side of the housing.

Maximum data availability and data security

The PCs of the C65xx series are supplied with an integrated power supply unit with 24 V DC input voltage, optionally with integrated uninterruptible power supply (UPS). A battery pack can be connected externally and installed on a DIN rail close to the PC.

Scalable performance

Industrial PCs from this series, combined with the Beckhoff Control Panels as an operating unit, produce a powerful control platform for machine construction and plant engineering – in particular with the TwinCAT automation software running on Windows 10 IoT Enterprise.

Central EtherCAT controller

Due to the two independent Ethernet interfaces, the C6515 and C6525 Industrial PCs are ideally suited for use as the compact central unit of an EtherCAT controller. Two hard disks, two SSDs or two CFast cards can be mirrored with the on-board SATA RAID 1 controller. If a RAID drive fails, the system continues to operate. The defective data carrier can be replaced while operation continues and the mirroring can be repeated.

Flexible expansion options

The C6515 and C6525 built-in PCs can be expanded by two additional PCIe module slots. The hood on the inside is manufactured 27 mm deeper for PCIe modules. The module slots can be populated by Beckhoff PCIe modules, for example by the FC9062 Dual-Gigabit-Ethernet module. The module slots also enable the use of fieldbus cards such as the FC3161.

The C6525 Built-in PCs can be expanded by two slots for standard PC plug-in cards. They accept market-standard PC plug-in cards up to a length of 190 mm. The 58 mm deeper hood at the rear covers a backplane that provides a choice of two PCI slots, two PCI Express slots or one PCI and one PCI Express slot. Card holders ensure the secure fixation of large cards.

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.