C6017-0010 | Ultra-compact Industrial PC

ℹ **Product status:** Regular delivery

With the C6017, Beckhoff is extending its range of ultra-compact Industrial PCs by a modular variant with scalable interface extensions and a 1-second UPS for the backup of persistent data. Due to its extremely compact size, the versatile and flexible mounting options and the impressive computing power of the Intel® Atom® processors, the C6017 fits into virtually any control cabinet and machine concept. Apart from use for a wide range of automation tasks, the C6017 is mainly suitable for use as an IoT gateway, or as an edge device. The basis for this is the full integration and compatibility of TwinCAT and EtherCAT.

Performance classes and application areas

The C601x series offers Intel® Atom® computing power for a wide range of automation and visualization tasks. Due to their impressive computing power in relation to their size, the PCs are mainly suited for use in Industrie 4.0 applications, for example as an IoT gateway.

Compactness

The Industrial PCs from the C60xx series are the most compact in their respective performance class in the Beckhoff portfolio. Despite the extended interface variety, only the height has changed in comparison with the base model C6015: with dimensions of just 82 x 82 x 66 mm, the C6017 also saves an enormous amount of space.

Flexible mounting

In particular the wide variety of mounting options for the rear panel of the control cabinet or the DIN rail should be highlighted with this Industrial PC series. The connection level can be freely oriented, i.e. adapted to possibly specified cable layouts. Due to their maximum flexibility, the PCs fit in any niche in the control cabinet, however small.

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Price-optimized

Due to the optimized housing and manufacturing concept, all Industrial PCs from the C60xx series are cost-optimized and are often less expensive in direct comparison with other series in the Industrial PC product area without restrictions in industrial compatibility, quality or durability.

All-in-one motherboard

The basic concept of the series always provides for an all-in-one motherboard developed and self-manufactured by Beckhoff. The single-board PCs are characterized by further improved robustness and durability. Modular, functional extensions in the form of a second board level can be integrated in every motherboard via an internal plug connector.

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	C6017-0010	Options
Device type	Ultra-compact control cabinet PC	
Housing	aluminum zinc die-cast housing	
Installation	mounting sheet at the rear wall	mounting sheet at the side wall or for DIN rail
Slots for hard disk/flash	1 slot for M.2 SSD	
Cooling	passive with single side cooling plate	
Free space for air circulation	5 cm (2") on top and bottom of the PC required	
Protection class	IP20	
Operating temperature	0...55 °C	
Dimensions (W x H x D)	82 x 82 x 66 mm (3.2" x 3.2" x 2.6"), without mounting plate	
Processor	Intel Atom® E3815, 1.46 GHz, 1 core (TC3: 40)	up to Intel Atom® E3845 1.91 GHz, 4 cores (TC3: 50)
Motherboard	compact motherboard for Intel Atom® E38xx	
Memory	2 GB DDR3L RAM	up to 4 GB DDR3L RAM ex factory
Graphic adapter	integrated in the processor	
Ethernet	2 x 100/1000BASE-T on-board	2 x 100/1000BASE-T
Hard disks/flash	40 GB M.2 SSD	up to 160 GB M.2 SSD

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Interfaces	1 x USB 3.0, 1 x USB 2.0, 1 x DisplayPort	2 x USB 2.0, 2 x RS232
Power supply	24 V DC	UPS
Operating system	Windows Embedded Compact 7, English	Windows 7, Windows Embedded Standard 7, Windows 10 IoT Enterprise

Options

Options	C6017-0010
C9900-C582	processor Intel Atom® E3827, 1.75 GHz, 2 cores (TC3: 40) and memory extension to 4 GB DDR3L RAM instead of Intel Atom® E3815, 1.46 GHz (TC3: 40) and 2 GB DDR3L RAM main memory. Memory extension requires a 64 bit operating system or only 3 GB are addressable. With Windows Embedded Compact 7 only one core is supported. Multicore support is available with Windows Embedded Standard 7, Windows 7 Professional, Windows 7 Ultimate and Windows 10 IoT Enterprise.
C9900-C583	processor Intel Atom® E3845, 1.91 GHz, 4 cores (TC3: 50) and memory extension to 4 GB DDR3L RAM instead of Intel Atom® E3815, 1.46 GHz (TC3: 40) and 2 GB DDR3L RAM main memory. Memory extension requires a 64 bit operating system or only 3 GB are addressable. Operating temperature range 0...50 °C With Windows Embedded Compact 7 only one core is supported. Multicore support is available with Windows Embedded Standard 7, Windows 7 Professional, Windows 7 Ultimate and Windows 10 IoT Enterprise.
C9900-E302	additional connectors in the front of a C6017-0010, dual Ethernet adapter with 2 x 100/1000BASE-T connector and 2 USB 2.0 ports
C9900-E311	additional connectors in the front of a C6017, 2 x serial port RS232, galvanically isolated, D-sub 9-pin connector
C9900-H591	80 GB M.2 SSD, 3D flash, extended temperature range, for C601x, instead of 40 GB M.2 SSD
C9900-H599	160 GB M.2 SSD, 3D flash, extended temperature range, for C601x, instead of 40 GB M.2 SSD
C9900-Z468	adapter cable DisplayPort to DVI, 40 cm
C9900-M664	mounting plate for C601x at the side wall, instead of plate at the rear wall
C9900-M665	mounting plate for lateral installation of the C601x; single part, not mounted
C9900-M666	mounting plate with DIN rail mounting adapter for C601x, instead of standard mounting plate
C9900-M667	mounting plate with DIN rail mounting adapter for C601x; single part, not mounted
C9900-U215	internal, capacitive 1-second UPS to ensure secure backup of persistent application data on the M.2 SSD, requires TwinCAT and Windows Embedded Compact 7, Windows Embedded Standard 7 or Windows 10 IoT Enterprise
C9900-S706	TwinCAT 2 PLC runtime for Windows Embedded Compact 7
C9900-S707	TwinCAT 2 NC PTP runtime for Windows Embedded Compact 7
C9900-S708	TwinCAT 2 NC I runtime for Windows Embedded Compact 7

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