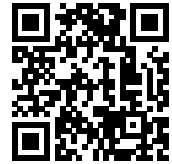# CP39xx-0010 | Multi-touch Control Panel with CP-Link 4

ℹ **Product status:** Regular delivery

Balance between latest PC technology and long-term availability of control components

Modern Control Panel technology doesn't stop with the selection of the touch technology, which forms the basis of the operation of a machine or plant. The transmission of the image and touch signals, combined with the power supply or other digital signals, must work perfectly and continuously, both mechanically and electrically, and over long distances in the industrial environment. In order to reliably ensure this, Beckhoff installs Panel electronics that it develops and manufactures itself at the production location in Verl.

Sturdy housing technology in a modern and high-class design

As a pioneer in PC-based automation, Beckhoff places the highest demands on the quality of its products and on their contemporary design. In order to harmonize the two, Beckhoff has been using solid aluminum as the raw material for the housings of its Control Panels since the 1990s. Aluminum offers very good mechanical, electrical and thermal properties. The simplicity of its processing also allows the manufacture of small series and enables customer-specific adaptations. Anodization produces a high-quality and durable surface. In addition to aluminum, stainless steel is also used as a basic material for some industries.

Advanced multi-touch operating scenarios

In the course of general digitalization, advanced multi-touch operating scenarios have become indispensable in industrial applications. Machine operators rightly expect the same level of user-friendliness in their machine or systems they are used to from smartphones and tablets. At the end of 2012 Beckhoff was one of the first automation companies to perfect advanced multi-touch technologies for use in harsh industrial environments and fitted them in its CP29xx built-in Control Panel series

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and the CP39xx series in the IP65 protection rating. With the CP39xx panels Beckhoff customers have a comprehensive range of different equipment variants at their disposal:

- diagonals from 7 to 24 inches
- 4:3 or widescreen format
- various connection techniques: DVI/USB for distances of up to 50 m between PC and Control Panel; CP-Link 4 and One Cable Technology for distances of up to 100 m
- standard or customized version
- aluminum housing
- integrated rotatable and tiltable mounting arm adapter

Multi-touch technology

Beckhoff uses exclusively manufactured multi-touch sensors in order to meet the high demands with regard to mechanical stability, harsh industrial environmental conditions, precise operation and elegant design. In addition to modern widescreen formats, classic diagonals in 4:3 format are also available on a long-term basis. This ensures a high degree of investment protection for the user. All necessary controller boards are developed by Beckhoff and manufactured in-house. The result is a very robust overall system, which enables state-of-the-art operating comfort even in harsh machine environments.

Mounting arm system for direct machine integration

Every IP65 Control Panel must be integrated into the machine or plant by the customer. Compact mounting arm adapters developed by Beckhoff support the customer with this: modern mechanical adapters allow the direct connection of a 48 mm round tube and enable the rotation and tilting of the panel. This solution is optionally available for all multi-touch Control Panels of the type C39xx. Alternatively, the customer can also carry out his own adaptations by means of a standardized 100 x 100 mm drilling pattern.

Perfectly matched Control Panel hardware

Irrespective of the application as a display device (HMI) or as a complete Control Panel PC, Beckhoff relies on its own expertise, with motherboards developed and manufactured in-house. In this way, the user benefits from flexible, high-performance hardware platforms with guaranteed long-term availability. The in-house hardware development is rounded off by in-house BIOS development, comprehensive expertise in the area of Microsoft operating systems and the ultra-compact Beckhoff TwinCAT/BSD operating system.

The Control Panel portfolio is supplemented by TwinCAT HMI. The visualization software is integrated optimally in the TwinCAT environment and supports the technical possibilities of the Beckhoff Control Panels through modern programming and parameterization for the most diverse use cases.

Beckhoff offers the following display sizes:

Wide screen

- 7-inch, resolution 800 x 480 (5:3)
- 12.1-inch, resolution 1280 x 800 (16:10)
- 15.6-inch, resolution 1366 x 768 (16:9)
- 18.5-inch, resolution 1366 x 768 (16:9)
- 21.5-inch, full HD resolution 1920 x 1080 (16:9)
- 24-inch, full HD resolution 1920 x 1080 (16:9)

Further display sizes

- 12-inch, resolution 800 x 600 (4:3)
- 15-inch, resolution 1024 x 768 (4:3)

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- 19-inch, resolution 1280 x 1024 (5:4)

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	CP39xx-0010	Options
Device type	Multi-touch Control Panel with CP-Link 4 interface	
Housing	aluminum housing with glass front	
Display size/resolution	7" 800 x 480, 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	
Protection rating	IP65	
Connection technology	CP-Link 4 enables to connect the Control Panel at a distance of up to 100 m to the PC via a Cat.6A cable with either an integrated or separate 24 V DC power supply depending on the transmitter module. CP-Link 4 transmits USB 2.0 with 100 Mbit/s and DVI.	
Mounting arm adapter	4 M6 threaded holes in distance of 100 x 100 mm in the connection block	rotatable and tiltable mounting arm adapter for mounting arm systems with 48 mm tube from top or from bottom
Interfaces	2 round connectors M12 IP65 for CP-Link 4 and optional 24 V power supply	
Operating temperature	0...50 °C	

Ordering information

CP39xx-0010	Multi-touch Control Panel with CP-Link 4
CP3907-0010	7-inch display 800 x 480, Display only, multi-finger touch screen with CP-Link 4
CP3912-0010	12-inch display 800 x 600, Display only, multi-finger touch screen with CP-Link 4
CP3913-0010	12.1-inch display 1280 x 800, Display only, multi-finger touch screen with CP-Link 4
CP3915-0010	15-inch display 1024 x 768, Display only, multi-finger touch screen with CP-Link 4
CP3916-0010	15.6-inch display 1366 x 768, Display only, multi-finger touch screen with CP-Link 4
CP3918-0010	18.5-inch display 1366 x 768, Display only, multi-finger touch screen with CP-Link 4
CP3919-0010	19-inch display 1280 x 1024, Display only, multi-finger touch screen with CP-Link 4
CP3921-0010	21.5-inch display 1920 x 1080, Display only, multi-finger touch screen with CP-Link 4
CP3924-0010	24-inch display 1920 x 1080, Display only, multi-finger touch screen with CP-Link 4

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Options

Options	Multi-touch Control Panel with CP-Link 4
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-M750	rotatable and tiltable mounting arm adapter for Control Panel CP3912 to CP3924 for Rittal and Rolec mounting arm systems with 48 mm tube from top
C9900-M751	rotatable and tiltable mounting arm adapter for Control Panel CP3912 to CP3924 for Rittal and Rolec mounting arm systems with 48 mm tube from bottom
C9900-M752	rotatable and tiltable mounting arm adapter for Control Panel CP3912 to CP3924 with push-button extension C9900-Gxxx for Rittal and Rolec mounting arm systems with 48 mm tube from top
C9900-M753	rotatable and tiltable mounting arm adapter for Control Panel CP3912 to CP3924 with push-button extension C9900-Gxxx for Rittal and Rolec mounting arm systems with 48 mm tube from bottom
C9900-M761	Rotatable and tiltable mounting arm adapter for Panel PCs CP32xx-16xx, CP37xx-16xx, CPX37xx or Control Panels CP39xx with option C9900-M338 or C9900-M362. Suitable for Rittal and Rolec mounting arm systems with 48 mm tube, wiring through the mounting arm. For mounting 4 M6 threaded holes at a distance of 100 x 100 mm and 70 x 130 mm. Vertical orientation can be changed by the customer. The tilt can be locked with a clamping lever. Not mounted at the factory.
C9900-M763	Rotatable and tiltable mounting arm adapter for Panel PCs CP37xx-16xx, CPX37xx or Control Panels CP39xx with option C9900-M338 or C9900-M362. Suitable for Rittal and Rolec mounting arm systems with 48 mm tube, wiring through the mounting arm. For mounting 4 M6 threaded holes at a distance of 100 x 100 mm and 70 x 130 mm. Vertical orientation can be changed by the customer. Not mounted at the factory.
C9900-M338	Connection block with 4 M6 threaded holes in distance of 70 x 130 mm on rear wall of Control Panels CP3912-0010 to CP3924-0010 without push-button extension, for mounting arm adapter C9900-M761 or C9900-M763. Instead of connection block with 4 M6 threaded holes in distance of 100 x 100 mm. Cable connections from the rear instead of from below.
C9900-E274	1-port USB socket at the mounting arm adapter C9900-M75x for Control Panel CP39xx or inside the connector block of CP39xx at basic configuration without mounting arm adapter, USB-A with screw-on cap IP65, accessible from outside
C9900-E324	1-port USB socket at the wiring area of a Control Panel CP39xx with connection block C9900-M338 or C9900-M362, USB 2.0 port, with screw-on cap IP65

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