## **BECKHOFF** New Automation Technology

### 4:3 – 5:4 ratio Control Panels and Panel PCs



# The comprehensive display portfolio – from classic 4:3/5:4 to modern widescreen.

Beckhoff Automation is known for a comprehensive range of industrial displays that serve as reliable HMI hardware and powerful, all-in-one machine controllers. While Beckhoff has introduced an exciting range of modern screen formats, including widescreen and panels that can be installed in landscape or portrait orientation, we haven't forgotten about the large number of applications that require displays in traditional 4:3/5:4 format. So while other vendors are making 4:3/5:4 panels and HMIs obsolete, Beckhoff continues to provide them as part of the company's overall Control Panel and Panel PC portfolio. In fact, we have continued to integrate the latest display technologies across the board, including multi-touch screen technologies that can be applied across screen formats, including in 4:3/5:4 versions.

### **Multi-touch Control Panels and Panel PCs**

### **Single-touch Control Panels and Panel PCs**



- front side IP 65
- for control cabinet installation
- all sides IP 65
- for mounting arm installation
- front side IP 65
- for control cabinet installation

The Beckhoff Control Panel and Panel PC product families offer easy installation in control cabinets, pendants or on mounting arms and poles for machines, manufacturing facilities and in buildings. High quality materials are used for the panel housings, including milled aluminum, steel and stainless steel. These can be applied in all manner of industries and meet application-specific requirements, from metalworking, plastics, packaging, food and beverage, building automation and much more. All Beckhoff Control Panels and Panel PCs can be completely customized according to the customer's brand identity. This can include a company logo, corporate colors, specific panel layouts to factor in buttons, switches, keys, joysticks and much more.

### **Beckhoff Control Panels**

These operator interface and display units are independent and separate from the controller. In this case the PC-based controller is located in the control cabinet. This control concept, which has been thoroughly implemented using the Beckhoff Control Panel, allows the user a great deal of freedom.

The CP6xxx and CP7xxx series Control Panels are designed for use as human-machine interfaces (HMIs). Interface and display elements create an independent unit, separate from the control level. Beckhoff Control Panels feature robust, yet elegant designs, with large screens available to the user, but in a low hardware depth. The PC-based controller is protected in the control cabinet, yet remains easily accessible.

Multi-touch Control Panels from Beckhoff are conceived both for control cabinet installation and for mounting arm installation. The CP29xx built-in Panel series is implemented with IP 65 protection at the front and IP 20 at the rear. The CP39xx Control Panels for mounting arm installation feature all-round IP 65 protection. The panels in the CP29xx-0000 and CP39xx-0000 ranges with DVI/USB Extended interface can be operated up to 50 m away from the Industrial PC. By combining CP-Link 4 – The One Cable Display Link – with CP29xx-0010 and CP39xx-0010 Control Panels, the distance between PC-based controller and the operator interface panels can be increased to 100 m.

### Beckhoff Panel PCs

All Beckhoff Panel PCs are equipped with powerful processors from Intel® Atom™ to Core™ i7. The series provides the appropriate Panel PC for every application, according to the available installation space. All housings are optimized in terms of space utilization and easy accessibility of all connectors and components.

The Panel PCs of the CP2xxx and CP3xxx series offer multi-touch functionality in 4:3/5:4 and widescreen display sizes (optionally also in portrait format). The Panel PCs of the CP6xxx and CP7xxx series can be equipped with single-touch functionality, touch pad or different front laminates.

# 6.5-inch 12-inch 15-inch 19-inch

- all sides IP 65
- for mounting arm installation

### Beckhoff offers the following display sizes:

### **Conventional display sizes**

- 5.7-inch, resolution 640 x 480 (4:3)
- 6.5-inch, resolution 640 x 480 (4:3)
- 12-inch, resolution 800 x 600 (4:3)
- 15-inch, resolution 1024 x 768 (4:3)
- 19-inch, resolution 1280 x 1024 (5:4)

### Wide screen (16:9)

- 7-inch, resolution 800 x 480
- 11.6-inch, resolution 1366 x 768
- 15.6-inch, resolution 1366 x 768
- 18.5-inch, resolution 1366 x 768
- 21.5-inch, full HD resolution 1920 x 1080
- 24-inch, full HD resolution 1920 x 1080





CP2xxx | Multi-touch Beckhoff Industrial PCs satisfy industry's demands:

- the right Industrial PC for every controller
- highest performance PCs with Intel® Celeron® up to Intel® Core™ i7 processors
- PCs with low power consumption with Intel® Mobile processors
- open standards following the norm ATX
- components carefully tested to ensure appropriateness for industrial applications
- appealing industrial design housings
- easy access to PC components
- Individual housing construction allows optimum adaptation to controller requirements.
- integration of electromechanical buttons, switches, scanners, handwheels and other components in the Control Panel
- designed for machine-oriented use
- long-term availability of components



▶ www.beckhoff.com/IPC

# Multi-touch Panel PCs in 4:3/5:4











	CP:

Multi-touch built-in				
	Display Resolution	12-inch 800 x 600	15-inch 1024 x 768	19-inch 1280 x 1024
	Format	4:3	4:3	5:4
CP22xx-0000/-0010	multi-finger	CP2212	CP2215	CP2219
– up to Core™ i3/i5/i7	touch screen			
CP26xx-0000	dual-finger	CP2612	CP2615	CP2619
– ARM Cortex™-A8	touch screen			
CP27xx-0000/-0010	multi-finger	CP2712	CP2715	CP2719
– up to $Atom^TM$	touch screen,			
	only horizontal			

Multi-touch Panel F				
	Display	12-inch	15-inch	19-inch
	Resolution	800 x 600	1024 x 768	1280 x 1024
	Format	4:3	4:3	5:4
CP32xx-0000/-0010	multi-finger	CP3212	CP3215	CP3219
– up to Core™ i3/i5/i7	touch screen,			
	only horizontal			
CP37xx-0010	multi-finger	CP3712	CP3715	CP3719
<ul> <li>up to Atom™</li> </ul>	touch screen,			
	only horizontal			

For further information on the complete range of Control Panel and Panel PC ratios, incl. widescreen formats, please visit

▶ www.beckhoff.com/multi-touch

# Multi-touch Control Panels

## in 4:3/5:4





Multi-touch built-in Control Panels, front side IP 65					
	Display	12-inch	15-inch	19-inch	
	Resolution	800 x 600	1024 x 768	1280 x 1024	
	Format	4:3	4:3	5:4	
CP29xx-0000  - DVI/USB Extended interface	multi-finger touch screen	CP2912-0000	CP2915-0000	CP2919-0000	
CP29xx-0010 – CP-Link 4	multi-finger touch screen	CP2912-0010	CP2915-0010	CP2919-0010	

Multi-touch Control Panels, all sides IP 65						
	Display	12-inch	15-inch	19-inch		
	Resolution	800 x 600	1024 x 768	1280 x 1024		
	Format	4:3	4:3	5:4		
CP39xx-0000  - DVI/USB Extended interface	multi-finger touch screen	CP3912-0000	CP3915-0000	CP3919-0000		
CP39xx-0010 - CP-Link 4	multi-finger touch screen	CP3912-0010	CP3915-0010	CP3919-0010		

For further information on CP-Link 4 ▶ www.beckhoff.com/CP-Link4

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▶ www.beckhoff.com/multi-touch

# Single-touch Panels in 4:3/5:4











Single-touch built-in	Panel PCs	, front side	IP 65
Jingie touch built in		, ii oiit siac	

	Display	5.7-inch	6.5-inch	12-inch	15-inch	19-inch
				1		
	Resolution	640 x 480	640 x 480	800 x 600	1024 x 768	1280 x 1024
	Format	4:3	4:3	4:3	4:3	5:4
CP62xx	without keys			CP6201	CP6202	CP6203
- 3½-inch motherboard	function keys			CP6211	CP6212	CP6213
– up to Core™ i3/i5/i7	numerical			CP6221	CP6222	CP6223
	alphanumerical			CP6231	CP6232/42	CP6233
CP65xx	without keys			CP6501	CP6502	CP6503
<ul> <li>ATX motherboard</li> </ul>	function keys			CP6511	CP6512	CP6513
– up to Core™ i3/i5/i7	numerical			CP6521	CP6522	CP6523
– 7 slots free	alphanumerical			CP6531	CP6532/42	CP6533
CP66xx	without keys	CP6607	CP6609	CP6601	CP6602	CP6603
- 31/2-inch motherboard	function keys		CP6619	CP6611	CP6612	CP6613
– ARM Cortex™-A8	numerical		CP6629	CP6621	CP6622	CP6623
	alphanumerical			CP6631	CP6632	CP6633
СР67хх	without keys	CP6707 <u>i</u>		CP6701	CP6702	CP6703
- 31/2-inch motherboard	function keys			CP6711	CP6712	CP6713
– Celeron™ ULV	numerical			CP6721	CP6722	CP6723
or Atom™	alphanumerical			CP6731	CP6732/42	CP6733
СЗ6хх	without keys			C3620	C3640	
– ATX motherboard						
– up to Core™ i3/i5/i7						
– 7 slots free						

### Single-touch Panel PCs, all sides IP 65

	Display	5.7-inch	6.5-inch	12-inch	15-inch	19-inch
	Resolution	640 x 480	640 x 480	800 x 600	1024 x 768	1280 x 1024
	Format	4:3	4:3	4:3	4:3	5:4
CP72xx	without keys			CP7201	CP7202	CP7203
- 3½-inch motherboard	function keys			CP7211	CP7212	CP7213
– up to Core™ i3/i5/i7	numerical			CP7221	CP7222	CP7223
	alphanumerical			CP7231	CP7232/42	CP7233
СР77хх	without keys			CP7701	CP7702	CP7703
<ul><li>– CP motherboard</li></ul>	function keys			CP7711	CP7712	CP7713
– Celeron® ULV	numerical			CP7721	CP7722	CP7723
	alphanumerical			CP7731	CP7732	CP7733











on the sides

Alphanumeric



keyboard



СР72хх



Without keys







СР69хх

Function keys

СР79хх

CP790x-14xx, stainless steel

Single-touch built-in Control Panels, front side IP 65							
	Display	5.7-inch	6.5-inch	12-inch	15-inch	19-inch	
	Resolution	640 x 480	640 x 480	800 x 600	1024 x 768	1280 x 1024	
	Format	4:3	4:3	4:3	4:3	5:4	
СР69хх	without keys	CP6907	CP6909	CP6901	CP6902	CP6903	
<ul><li>– DVI/USB Extended</li></ul>	function keys		CP6919	CP6911	CP6912	CP6913	
interface	numerical		CP6929	CP6921	CP6922	CP6923	
	alphanumerical			CP6931	CP6932	CP6933	
					CP6942		

Single-touch Control Panels, all sides IP 65							
	Display	5.7-inch	6.5-inch	12-inch	15-inch	19-inch	
	Resolution	640 x 480	640 x 480	800 x 600	1024 x 768	1280 x 1024	
	Format	4:3	4:3	4:3	4:3	5:4	
СР79хх	without keys		CP7909	CP7901	CP7902	CP7903	
<ul> <li>– DVI/USB Extended</li> </ul>	function keys		CP7919	CP7911	CP7912	CP7913	
interface	numerical		CP7929	CP7921	CP7922	CP7923	
	alphanumerical			CP7931	CP7932	CP7933	
					CP7942		

Single-touch Control Panels in stainless steel housing, all sides IP 65							
	Display	5.7-inch	6.5-inch	12-inch	15-inch	19-inch	
	Resolution	640 x 480	640 x 480	800 x 600	1024 x 768	1280 x 1024	
	Format	4:3	4:3	4:3	4:3	5:4	
СР79хх	without keys			CP7901-14xx	CP7902-14xx	CP7903-14xx	
<ul><li>– DVI/USB Extended interface</li></ul>							

For further information on the complete range of Control Panel and Panel PC ratios please visit

▶ www.beckhoff.com/single-touch

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**Main catalog** 



PC control magazine (additionally as App)





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