



# HTML5 HMI

## Improve visualisation with Industrial 4.0 Touch Panels

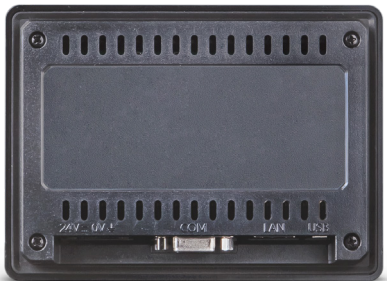
### New HMI Generation of SBC

- ▶ Display sizes: 4.3", 7", 10.1", 15.6", 21.5"
- ▶ Touch technologies: resistive and capacitive (multi touch) versions
- ▶ Beautiful and robust design for control cabinet installation
- ▶ Modern HTML5 Browser based on Linux
- ▶ High Cyber Security level protects from unauthorized accesses
- ▶ High quality, industrial grade
- ▶ Long life cycle > 10 year
- ▶ PCD Controllers, HMI and tools are harmonized

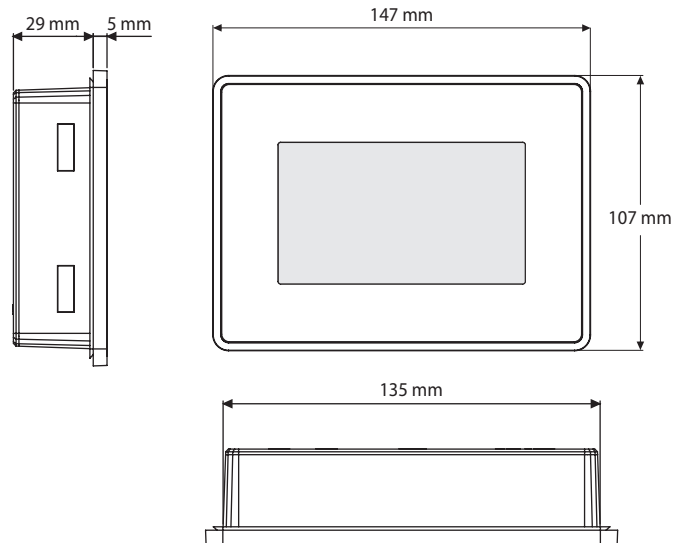
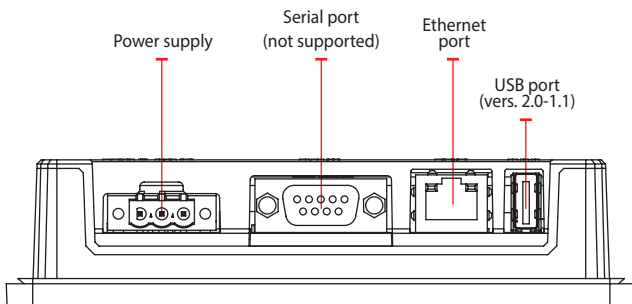
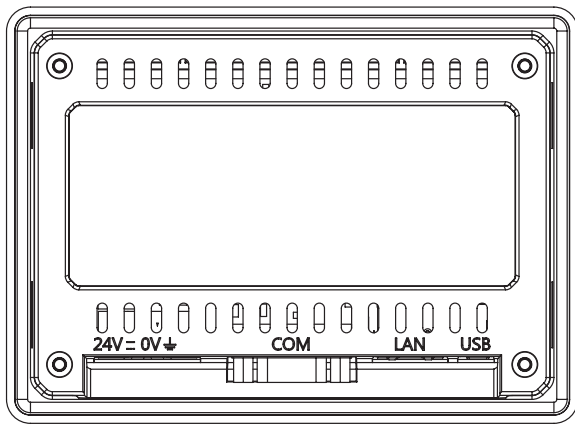
### Specifications / Advantages

- ▶ Powerful and fast ARM Cortex-A9 Processor
- ▶ Interfaces: Ethernet, USB
- ▶ Power supply: 24 VDC
- ▶ HTML5 Chromium Browser to access PCD Web-Server or any other web-server
- ▶ Compatible with HTML5 Web-Editor projects
- ▶ Brilliant up to 2,100,000 pixel display
- ▶ Wide angle visibility
- ▶ Capacitive touch versions in total glass design. Resistant to scratches, UV and chemicals
- ▶ IP66 protection from the front
- ▶ Operating temperature -20°C to +60°C
- ▶ Certifications : IECEx, ATEX, DNV-GL, Lloyd's Register, UL

# PCD7.D543RF | 4,3" HTML5 Web Panel, resistive touch



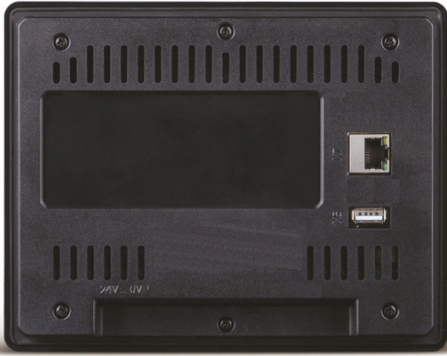
System Resources	
Display - Colors	4.3" TFT, 16:9, LED, 64 K
Resolution	480 x 272
Brightness	200 Cd/m <sup>2</sup> typ.
Dimming	Yes
Touchscreen	Resistive
CPU	ARM Cortex-A8, 1 GHz
Operating System	Linux
RAM	512 MB
Flash	4 GB
Real Time Clock, RTC Back-up, Buzzer	Yes, Yes, Yes
Interface	
Ethernet port	1 (port 0 = 10/100)
USB port	1 (Host v. 2.0, max. 500 mA)
Serial port	Not supported
SD card	No
Expansion	No
Ratings	
Power supply	24 Vdc (10 ... 32 Vdc)
Current Consumption	0.25 A max. at 24 Vdc
Input Protection	Automatic
Battery	Yes (With Supercapacitor)
Environment Conditions	
Operating Temp	0 ... +50 °C (vertical installation)
Storage Temp	-20 ... +70 °C
Operating / Storage Humidity	5 ... 85 % RH, non condensing
Protection Class	IP66 (front), IP20 (rear)
Dimensions and Weights	
Faceplate L x H	147 x 107 mm (5.78 x 4.21")
Cutout A x B	136 x 96 mm (5.35 x 3.78")
Depth	29 + 5 mm (1.14 + 0.19")
Weight	Approx 0.4 Kg
Approvals	
CE	Emission EN 61000-6-4, Immunity EN 61000-6-2 for installation in industrial environments Emission EN 61000-6-3, Immunity EN 61000-6-1 for installation in residential environments
UL	ANSI/UL 508



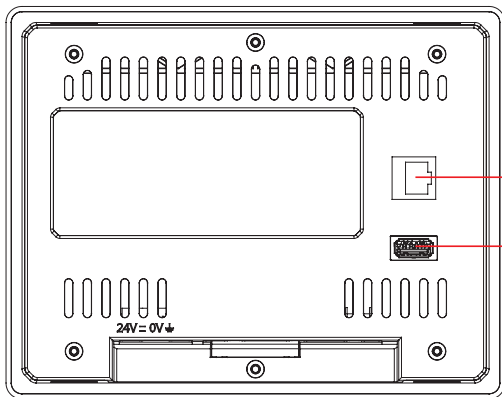
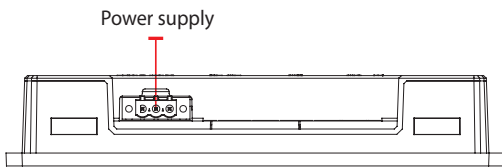
## Ordering information

Part Number	Type	Description
PCD7.D543RF	4.3" HTML5 Web Panel, resistive touch	4.3" HTML5 Web Panel, TFT color, 480 x 272 pixel, resistive touch screen, 1 Ethernet port, 1 USB host port

# PCD7.D570RF | 7" HTML5 Web Panel, resistive touch

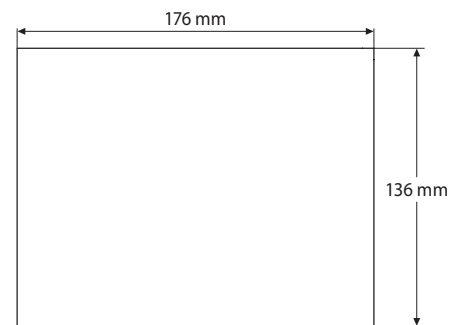
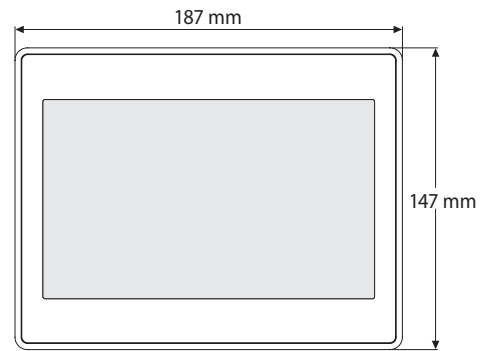
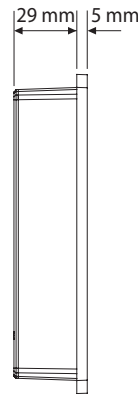


System Resources	
Display - Colors	7" TFT, 15:9, LED, 64 K
Resolution	800 × 480, WVGA
Brightness	200 Cd/m <sup>2</sup> typ.
Dimming	to 0 %
Touchscreen	Resistive
CPU	ARM Cortex-A9, dual core, 800 MHz
Operating System	Linux
RAM	1 GB
Flash	4 GB
Real Time Clock, RTC Back-up, Buzzer	Yes, No, No
Interface	
Ethernet port	1 (port 0 = 10/100/1000)
USB port	1 (Host V2.0, max. 100 mA)
Ratings	
Power supply	24 Vdc (10 ... 32 Vdc)
Current Consumption	0.3 A at 24 Vdc (max.)
Input Protection	Electronic
Environment Conditions	
Operating Temp	0 ... +50 °C (vertical installation)
Storage Temp	- 20 ... +70 °C
Operating / Storage Humidity	5 ... 85 % RH, non condensing
Protection Class	IP66 (front); IP20 (rear)
Dimensions and Weights	
Faceplate L × H	187 × 147 mm (7.36 × 5.79")
Cutout A × B	176 × 136 mm (6.93 × 5.35")
Depth D + T	29 + 5 mm (1.14 + 0.19")
Weight	0.875 kg
Dimensions and Weights	
CE	Emission EN 61000-6-4, Immunity EN 61000-6-2 for installation in industrial environments Emission EN 61000-6-3, Immunity EN 61000-6-1 for installation in residential environments
UL	ANSI/UL 508



Ethernet port 0  
(10/100/1000 Mb)

USB port



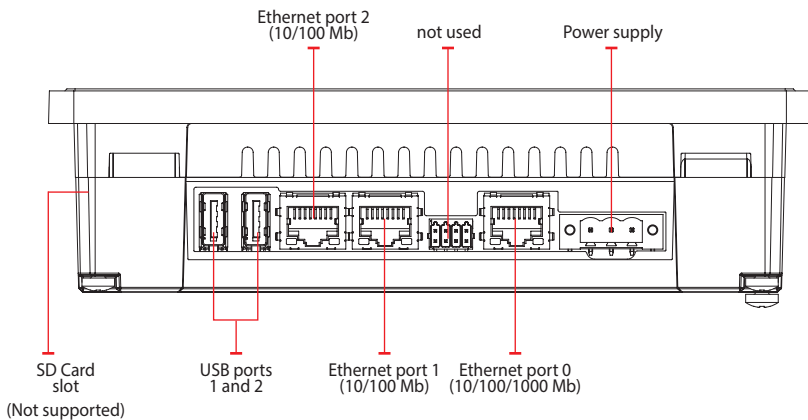
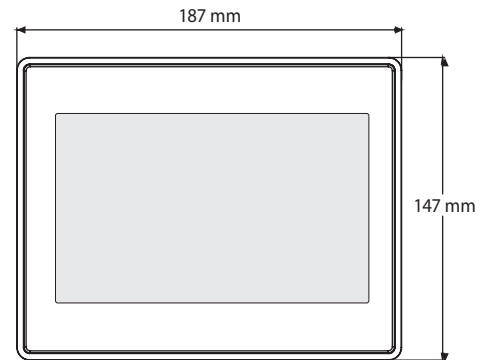
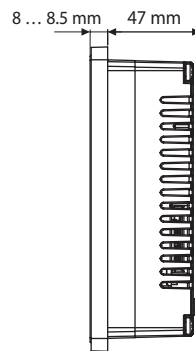
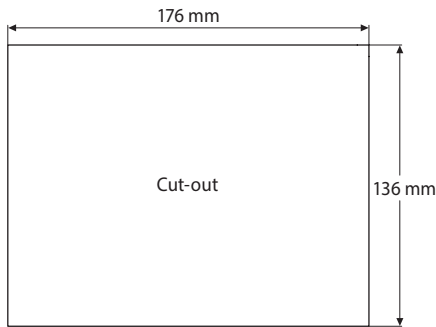
## Ordering information

Part Number	Type	Description
PCD7.D570RF	7" HTML5 Web Panel, resistive touch	7" HTML5 Web Panel, TFT color, 800x480 pixel, resistive touch screen, 1 Ethernet port, 1 USB host port

# PCD7.D570CF | 7" HTML5 Web Panel, capacitive touch



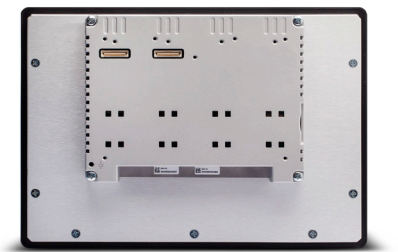
System Resources	
Display - Colors	7" TFT, 15:9, LED, 16 M
Resolution	800 × 480, WVGA
Brightness	500 Cd/m <sup>2</sup> typ.
Dimming	to 0 %
Touchscreen	True Glass Projected Capacitive, Multitouch
CPU	ARM Cortex-A9, dual core, 800 MHz
Operating System	Linux
RAM	1 GB
Flash	4 GB
Real Time Clock, RTC Back-up, Buzzer	Yes, Yes, Yes
Interface	
Ethernet port	3 (port 0 = 10/100/1000, port 1 = 10/100, port 2 = 10/100)
USB port	2 (Host V2.0, max. 500 mA)
SD card	Not supported
Ratings	
Power supply	24 Vdc (10 ... 32 Vdc)
Current Consumption	0.7 A at 24 Vdc (max.)
Input Protection	Electronic
Battery	Rechargeable Lithium battery, not user-replaceable
Environment Conditions	
Operating Temp	-20 ... +60 °C (vertical installation) USB devices may limit max ambient temperature to +50 °C
Storage Temp	-20 ... +70 °C
Operating / Storage Humidity	5 ... 85 % RH, non condensing
Protection Class	IP66 (front), IP20 (rear)
Dimensions and Weights	
Faceplate L × H	187 × 147 mm (7.36 × 5.79")
Cutout A × B	176 × 136 mm (6.93 × 5.35")
Depth D + T	47 + 8 ... 8.5 mm (1.85 + 0.31 ... 0.33")
Weight	1.5 kg
Approvals	
CE	Emission EN 61000-6-4, Immunity EN 61000-6-2 for installation in industrial environments
UL	UL 61010-1, 3rd Edition and UL 61010-2-201, 1st Edition



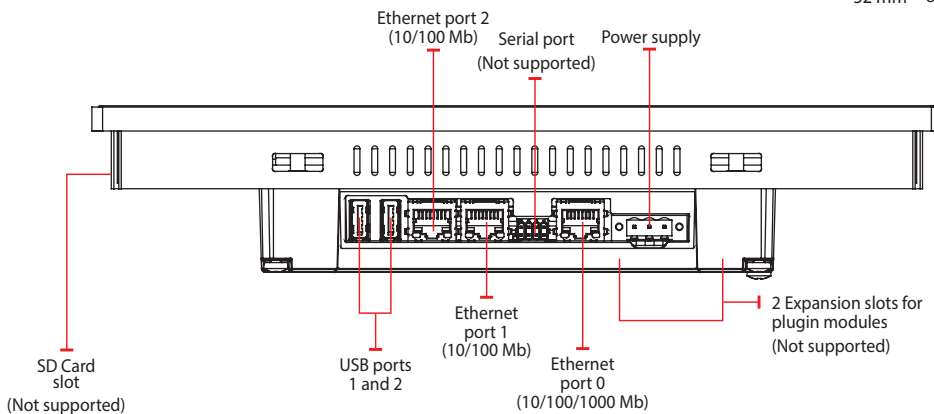
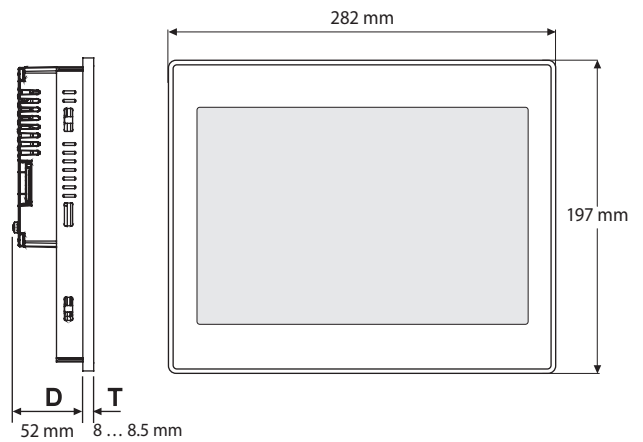
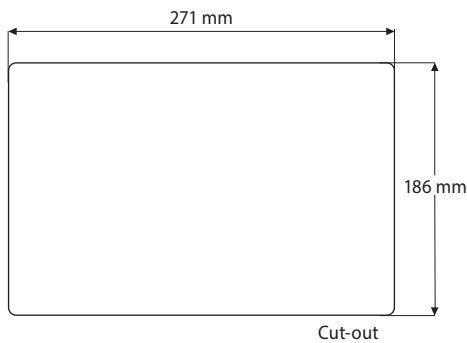
## Ordering information

Part Number	Type	Description
PCD7.D570CF	7" HTML5 Web Panel, capacitive touch	7" HTML5 Web Panel, TFT color, 800 × 480 pixel, capacitive multi touch screen, 3 Ethernet port, 2 USB host port

# PCD7.D510CF | 10,1" HTML5 Web Panel, capacitive touch



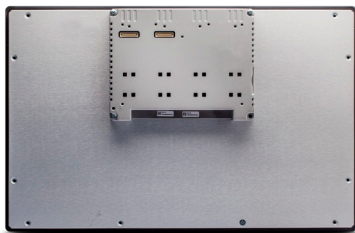
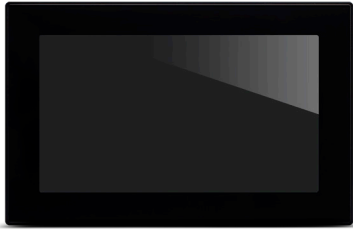
System Resources	
Display - Colors	10.1" TFT, 16:10, LED, 16 M
Resolution	1280 × 800, WXGA
Brightness	500 Cd/m <sup>2</sup> typ.
Dimming	to 0 %
Touchscreen	True Glass Projected Capacitive, Multitouch
CPU	ARM Cortex-A9, dual core, 800 MHz
Operating System	Linux
RAM	1 GB
Flash	4 GB
Real Time Clock, RTC Back-up, Buzzer	Yes, Yes, Yes
Interface	
Ethernet port	3 (port 0 = 10/100/1000, port 1 = 10/100, port 2 = 10/100)
USB port	2 (Host V2.0, max. 500 mA)
Serial port	Not supported
SD card	Not supported
Expansion	Not supported
Ratings	
Power supply	24 Vdc (10 ... 32 Vdc)
Current Consumption	1.0 A at 24 Vdc (max.)
Input Protection	Electronic
Battery	Rechargeable Lithium battery, not user-replaceable
Environment Conditions	
Operating Temp	- 20 ... +60 °C (vertical installation) USB devices may limit max temperature to +50 °C
Storage Temp	- 20 ... +70 °C
Operating / Storage Humidity	5 ... 85 % RH, non condensing
Protection Class	IP66 (front), IP20 (rear)
Dimensions and Weights	
Faceplate L × H	282 × 197 mm (11.10 × 7.76")
Cutout A × B	271 × 186 mm (10.67 × 7.32")
Depth D + T	52 + 8 ... 8.5 mm (2.05 + 0.31 ... 0.33")
Weight	2.5 kg
Approvals	
CE	Emission EN 61000-6-4, Immunity EN 61000-6-2 for installation in industrial environments
UL	UL 61010-1, 3rd Edition and UL 61010-2-201, 1st Edition



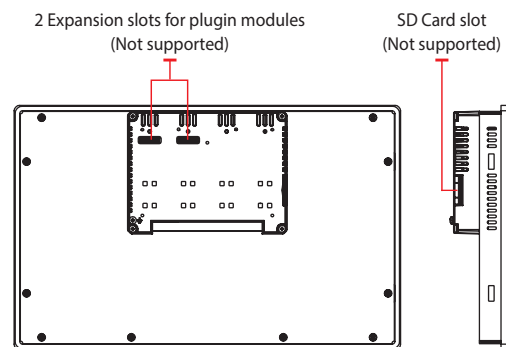
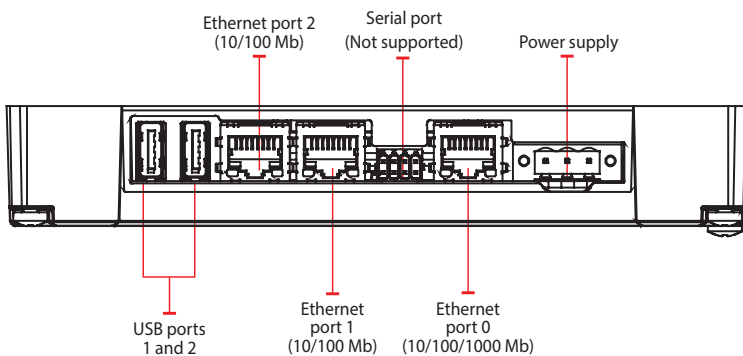
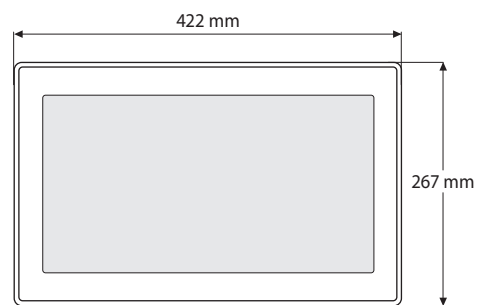
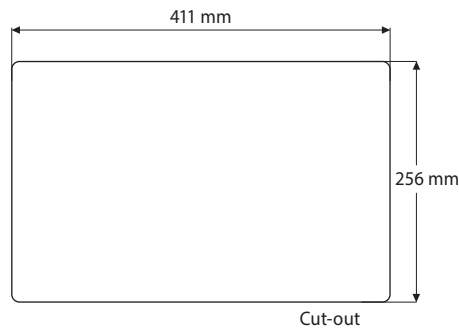
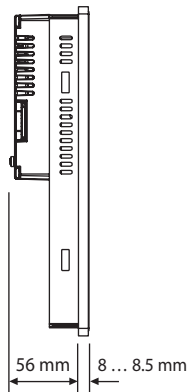
## Ordering information

Part Number	Type	Description
PCD7.D510CF	10.1" HTML5 Web Panel, capacitive touch	10.1" HTML5 Web Panel, TFT color, 1280 × 800 pixel, capacitive multi touch screen, 3 Ethernet port, 2 USB host port

# PCD7.D515CF | 15,6" HTML5 Web Panel, capacitive touch



System Resources	
Display - Colors	15,6" TFT, LED, 16 M
Resolution	1366 × 768, HD
Brightness	400 Cd/m <sup>2</sup> typ.
Dimming	to 0 %
Touchscreen	True Glass Projected Capacitive, Multitouch
CPU	ARM Cortex-A9, quad core, 800 MHz
Operating System	Linux
RAM	2 GB
Flash	8 GB
Real Time Clock, RTC Back-up, Buzzer	Yes, Yes, Yes
Interface	
Ethernet port	3 (port 0 = 10/100/1000, port 1 = 10/100, port 2 = 10/100)
USB port	2 (Host V2.0, max. 500 mA)
Serial port	Not supported
SD card	Not supported
Expansion	Not supported
Ratings	
Power supply	24 Vdc (10 ... 32 Vdc)
Current Consumption	1.2 A at 24 Vdc (max.)
Input Protection	Electronic
Battery	Rechargeable Lithium battery, not user-replaceable
Environment Conditions	
Operating Temp	-20 ... +60 °C (vertical installation) Plug-in modules and USB devices may limit max temperature to +50 °C
Storage Temp	-20 ... +70 °C
Operating / Storage Humidity	5 ... 85 % RH, non condensing
Protection Class	IP66 (front), IP20 (rear)
Dimensions and Weights	
Faceplate L × H	422 × 267 mm (16.6 × 10.5")
Cutout A × B	411 × 256 mm (16.18 × 10")
Depth D + T	56 + 8 ... 8.5 mm (2.20 + 0.31 ... 0.33")
Weight	4.1 kg
Approvals	
CE	Emission EN 61000-6-4, Immunity EN 61000-6-2 for installation in industrial environments
UL	UL 61010-1, 3rd Edition and UL 61010-2-201, 1st Edition

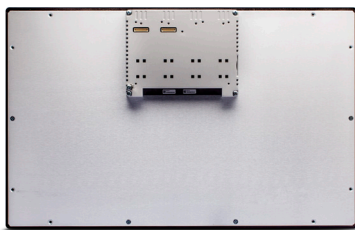


## Ordering information

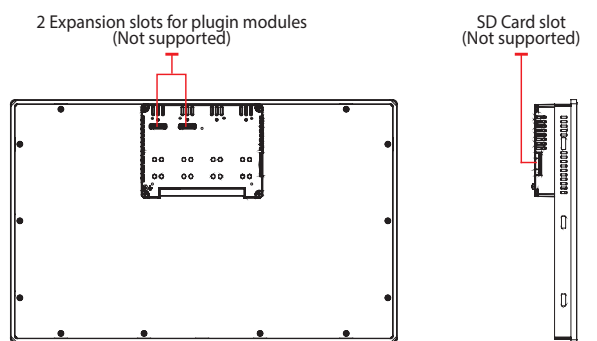
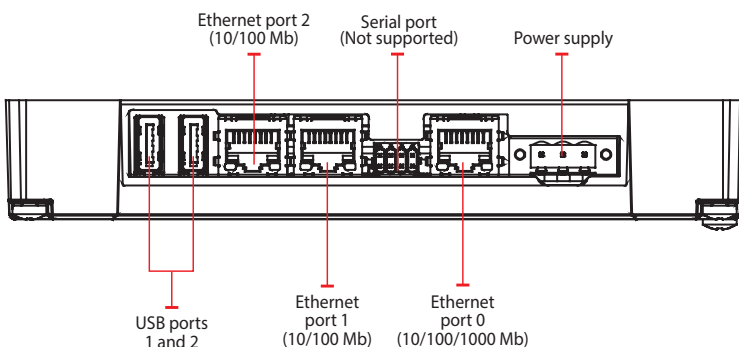
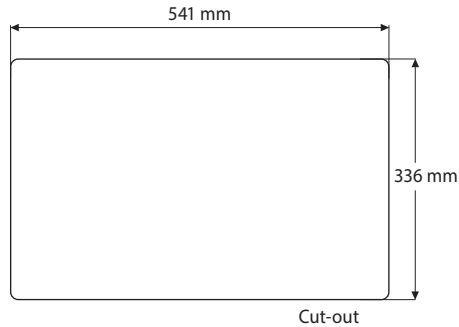
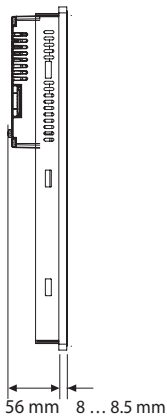
Part Number	Type	Description
PCD7.D515CF	15.6" HTML5 Web Panel, capacitive touch	15.6" HTML5 Web Panel, TFT color, 1366 × 768 pixel, capacitive multi touch screen, 3 Ethernet port, 2 USB host port



# PCD7.D521CF | 21,5" HTML5 Web Panel, capacitive touch



Resources	
Display - Colors	21,5" TFT, LED, 16 M
Resolution	1920 × 1080, full HD
Brightness	300 Cd/m <sup>2</sup> typ.
Dimming	to 0 %
Touchscreen	True Glass Projected Capacitive, Multitouch
CPU	ARM Cortex-A9, quad core, 800 MHz
Operating System	Linux
RAM	2 GB
Flash	8 GB
Real Time Clock, RTC Back-up, Buzzer	Yes, Yes, Yes
Interface	
Ethernet port	3 (port 0 = 10/100/1000, port 1 = 10/100, port 2 = 10/100)
USB port	2 (Host V2.0, max. 500 mA)
Serial port	Not supported
SD card	Not supported
Expansion	Not supported
Ratings	
Power supply	24 Vdc (10 ... 32 Vdc)
Current Consumption	1.7 A at 24 Vdc (max.)
Input Protection	Electronic
Battery	Rechargeable Lithium battery, not user-replaceable
Environment Conditions	
Operating Temp	-20 ... +60 °C (vertical installation) Plug-in modules and USB devices may limit max temperature to +50 °C
Storage Temp	-20 ... +70 °C
Operating / Storage Humidity	5 ... 85 % RH, non condensing
Protection Class	IP66 (front), IP20 (rear)
Dimensions and Weights	
Faceplate L × H	552 × 347 mm (21,73 × 13,66")
Cutout A × B	541 × 336 mm (21.30 + 13.23")
Depth D + T	56 + 8 ... 8.5 mm (2.20 + 0.31 ... 0.33")
Weight	6.1 kg
Approvals	
CE	Emission EN 61000-6-4, Immunity EN 61000-6-2 for installation in industrial environments
UL	UL 61010-1, 3rd Edition and UL 61010-2-201, 1st Edition



## Ordering information

Part Number	Type	Description
PCD7.D521CF	21.5" HTML5 Web Panel, capacitive touch	21.5" HTML5 Web Panel, TFT color, 1920 × 1080 pixel, capacitive multi touch screen, 3 Ethernet port, 2 USB host port

# Product overview



PCD7.D543RF

PCD7.D570RF

PCD7.D570CF

PCD7.D510CF

PCD7.D515CF

PCD7.D521CF

	PCD7.D543RF	PCD7.D570RF	PCD7.D570CF	PCD7.D510CF	PCD7.D515CF	PCD7.D521CF
<b>System Resources</b>						
Display - Colors	4.3" TFT, 16:9, LED, 64 K	7" TFT, 15:9, LED, 64 K	7" TFT, 15:9, LED, 16 M	10.1" TFT, 16:9, LED, 16 M	15,6" TFT, LED, 16 M	21,5" TFT, LED, 16 M
Resolution	480 × 272	800 × 480, WVGA	800 × 480, WVGA	1280 × 800, WXGA	1366 × 768, HD	1920 × 1080, full HD
Brightness	200 Cd/m <sup>2</sup> typ.	200 Cd/m <sup>2</sup> typ.	500 Cd/m <sup>2</sup> typ.	500 Cd/m <sup>2</sup> typ.	400 Cd/m <sup>2</sup> typ.	300 Cd/m <sup>2</sup> typ.
Dimming	Yes	to 0 %	to 0 %	to 0 %	to 0 %	to 0 %
Touchscreen	Resistive	Resistive	True Glass Projected Capacitive, Multitouch	True Glass Projected Capacitive, Multitouch	True Glass Projected Capacitive, Multitouch	True Glass Projected Capacitive, Multitouch
CPU	ARM Cortex-A8, 1 GHz	ARM Cortex-A9, dual core, 800 MHz	ARM Cortex-A9, dual core, 800 MHz	ARM Cortex-A9, dual core, 800 MHz	ARM Cortex-A9, quad core, 800 MHz	ARM Cortex-A9, quad core, 800 MHz
Operating System	Linux	Linux	Linux	Linux	Linux	Linux
RAM	512 MB	1 GB	1 GB	1 GB	2 GB	2 GB
Flash	4 GB	4 GB	4 GB	4 GB	8 GB	8 GB
Real Time Clock	Yes	Yes	Yes	Yes	Yes	Yes
RTC Back-up	Yes	No	Yes	Yes	Yes	Yes
Buzzer	Yes	No	Yes	Yes	Yes	Yes
<b>Interface</b>						
Ethernet port	1 (port 0 = 10/100)	1 (port 0 = 10/100/1000)	3 (port 0 = 10/100/1000, port 1 = 10/100, port 2 = 10/100)	3 (port 0 = 10/100/1000, port 1 = 10/100, port 2 = 10/100)	3 (port 0 = 10/100/1000, port 1 = 10/100, port 2 = 10/100)	3 (port 0 = 10/100/1000, port 1 = 10/100, port 2 = 10/100)
USB port	1 (Host v. 2.0, max. 500 mA)	1 (Host V2.0, max. 100 mA)	2 (Host V2.0, max. 500 mA)	2 (Host V2.0, max. 500 mA)	2 (Host V2.0, max. 500 mA)	2 (Host V2.0, max. 500 mA)
Serial port	Not supported	No	Not supported	Not supported	Not supported	Not supported
SD card	No	No	Not supported	Not supported	Not supported	Not supported
Expansion	No	No	Not supported	Not supported	Not supported	Not supported
<b>Ratings</b>						
Power supply	24 Vdc (10 ... 32 Vdc)	24 Vdc (10 ... 32 Vdc)	24 Vdc (10 ... 32 Vdc)	24 Vdc (10 ... 32 Vdc)	24 Vdc (10 ... 32 Vdc)	24 Vdc (10 ... 32 Vdc)
Current Consumption	0.25 A max. at 24 Vdc	0.3 A at 24 Vdc (max.)	0.7 A at 24 Vdc (max.)	1.0 A at 24 Vdc (max.)	1.2 A at 24 Vdc (max.)	1.7 A at 24 Vdc (max.)
Input Protection	Automatic	Electronic	Electronic	Electronic	Electronic	Electronic
Battery	Yes (With Supercapacitor)		Rechargeable Lithium battery, not user-replaceable	Rechargeable Lithium battery, not user-replaceable	Rechargeable Lithium battery, not user-replaceable	Rechargeable Lithium battery, not user-replaceable
<b>Environment Conditions</b>						
Operating Temp	0 ... +50 °C (vertical installation)	0 ... +50 °C (vertical installation)	-20 ... +60 °C (vertical installation) Plug-in modules and USB devices may limit max temperature to +50 °C	-20 ... +60 °C (vertical installation) Plug-in modules and USB devices may limit max temperature to +50 °C	-20 ... +60 °C (vertical installation) Plug-in modules and USB devices may limit max temperature to +50 °C	-20 ... +60 °C (vertical installation) Plug-in modules and USB devices may limit max temperature to +50 °C
Storage Temp	-20 ... +70 °C	-20 ... +70 °C	-20 ... +70 °C	-20 ... +70 °C	-20 ... +70 °C	-20 ... +70 °C
Operating / Storage Humidity	5 ... 85 % RH, non condensing	5 ... 85 % RH, non condensing	5 ... 85 % RH, non condensing	5 ... 85 % RH, non condensing	5 ... 85 % RH, non condensing	5 ... 85 % RH, non condensing
Protection Class	IP66 (front), IP20 (rear)	IP66 (front), IP20 (rear)	IP66 (front), IP20 (rear)	IP66 (front), IP20 (rear)	IP66 (front), IP20 (rear)	IP66 (front), IP20 (rear)
<b>Dimensions and Weights</b>						
Faceplate L × H	147 × 107 mm (5.78 × 4.21")	187 × 147 mm (7.36 × 5.79")	187 × 147 mm (7.36 × 5.79")	282 × 197 mm (11.10 × 7.76")	422 × 267 mm (16.61 × 10.51")	552 × 347 mm (21.73 × 13.66")
Cutout A × B	136 × 96 mm (5.35 × 3.78")	176 × 136 mm (6.93 × 5.35")	176 × 136 mm (6.93 × 5.35")	271 × 186 mm (10.67 × 7.32")	411 × 256 mm (16.18 × 10.08")	541 × 336 mm (21.30 × 13.23")
Depth	29 + 5 mm (1.14 + 0.19")	29 + 5 mm (1.14 + 0.19")	47 + 8 ... 8.5 mm (1.85 + 0.31 ... 0.33")	52 + 8 ... 8.5 mm (2.05 + 0.31 ... 0.33")	56 + 8 ... 8.5 mm (2.20 + 0.31 ... 0.33")	56 + 8 ... 8.5 mm (2.20 + 0.31 ... 0.33")
Weight	Approx 0.4 kg	0.875 kg	1.5 kg	2.5 kg	4.1 kg	6.1 kg
<b>Approvals</b>						
CE for installation in industrial environments	Emission EN 61000-6-4, Immunity EN 61000-6-2	Emission EN 61000-6-4, Immunity EN 61000-6-2	Emission EN 61000-6-4, Immunity EN 61000-6-2	Emission EN 61000-6-4, Immunity EN 61000-6-2	Emission EN 61000-6-4, Immunity EN 61000-6-2	Emission EN 61000-6-4, Immunity EN 61000-6-2
CE for installation in residential environments	Emission EN 61000-6-3, Immunity EN 61000-6-1	-	-	-	-	-
UL	ANSI/UL 508	UL 61010-1, 3rd Edition and UL 61010-2-201, 1st Edition	UL 61010-1, 3rd Edition and UL 61010-2-201, 1st Edition	UL 61010-1, 3rd Edition and UL 61010-2-201, 1st Edition	UL 61010-1, 3rd Edition and UL 61010-2-201, 1st Edition	UL 61010-1, 3rd Edition and UL 61010-2-201, 1st Edition



