

HMIs and industrial PCs

HMIs and industrial PCs are the key to the efficient operation and monitoring of your systems and machines. You can work with a fully enclosed IP65 panel PC directly on site – or design detailed user interfaces as the interface to your system using a powerful HMI device.

HMIs

Human-machine interfaces, or HMIs for short, represent cost-effective automation based on efficient input and monitoring. Depending on your requirements, choose devices for WebVisit or Visu+ software, or for HTML5 applications.

Industrial PCs

Industrial PCs, or IPCs for short, combine the computing power of modern processors with the robustness and reliability of industrial components. Together with the right software, IPCs provide efficient and versatile solutions for control, operation, and monitoring.

IPCs for mobile applications

Mobile panel PCs are a state-of-the-art solution for intuitive teach-in.

HMIs and IPCs for harsh ambient conditions

Robust HMIs and industrial PCs are designed for permanent exposure to weather influences. Thanks to the IP67-protected front, sunlight readable display, and extended temperature range, you can use these devices in charging stations or sewage treatment plants, for example.

IPCs for the Ex area

Robust industrial PCs, developed for use in potentially explosive environments, are certified in accordance with IECEx and ATEX Zone 2/22.

HMIs for maritime applications

For demanding use on ships, Phoenix Contact offers robust operator and display panels.

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HMIs and industrial PCs

Product overview

HMIs for HTML5 applications



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Monitors with touch function

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IPCs for mobile applications



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HMIs and IPCs for harsh ambient conditions



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IPCs for the Ex area



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Web panels

The new BWP 2000 HMI device series with HTML5-compatible browser offers cost-effective web panels for basic applications. The touch panels with open web browser, which are an efficient entry-level version, extend the existing portfolio and perform operating and monitoring tasks with basic visualization requirements.

Your advantages:

- HTML5-compatible browser integrated in all devices
- Easy startup, just enter the IP and URL
- No security updates are required for Java or Flash plug-ins, thanks to HTML5
- Energy efficient, thanks to LED backlight
- Best price/performance ratio

Display data
Display lighting type
Brightness
Display backlight MTBF
Color spectrum
Touch technology

Computer data

Operating system
Processor
RAM
Mass storage
Interfaces
Network
Power supply unit

General data

Degree of protection
Ambient temperature (operation)
Mounting type
Vibration (operation)
Shock
EMC note

Description

Web panel

- Display: 10.92 cm (4.3"), 480 x 272 Pixel(s) (WQVGA)
- Display: 17.8 cm (7"), 800 x 480 Pixel(s) (WVGA)
- Display: 25.9 cm (10.2"), 1024 x 600 Pixel(s)



For basic HTML5 applications

Ex:

Technical data

LED
350 cd/m²
25000 h
16.7 million colors
analog resistive (polyester)
Yocto/Linux
Arm® Cortex®-A9, 1 GHz
1 GB DDR2
Flash eMMC, 4 GB
1x USB Host 2.0
1 x Ethernet (10/100 Mbps), RJ45
24 V DC ±15%
IP66 (on the front), IP20 (on the back)
0°C ... 50°C
Front installation
DIN EN 60068-2-6
DIN EN 60068-2-27
Class A product, see page 527

Ordering data

Type	Order No.	Pcs./Pkt.
BWP 2043W	1060549	1
BWP 2070W	1060632	1
BWP 2102W	1060630	1

Configurable web panels

The new WP 4000 HMI device series with HTML5-compatible browser offers high-performance web panels for demanding applications. The WP 4000 devices perform operating and monitoring tasks with high visualization requirements, thereby extending the existing product portfolio to include a standard version.

Your advantages:

- Flexible, thanks to open web standard and free choice of web server and visualization software
- No security updates are required for Java or Flash plug-ins, thanks to HTML5
- Ideal for use with PLCnext Engineer or CODESYS
- Visualization of self-programmed JavaScript applications possible
- Secure communication, thanks to SSL-encrypted data transmission



For demanding HTML5 applications

Display data

Display (configuration option)

Screen resolution

Display lighting type

Brightness

Display backlight MTBF

Color spectrum

Touch technology (configuration option)

Computer data

Operating system

Processor

RAM

Mass storage

Interfaces

Network

Power supply unit

General data

Degree of protection

Ambient temperature (operation)

Mounting type

Vibration (operation)

Shock

EMC note

Description

Web panel**Mounting kit**, including hardware for installation

- panel installation

- panel installation

Technical data

17.8 cm/7" TFT
25.7 cm / 10.1" TFT
30.7 cm/12.1" TFT
800 x 480 Pixel(s) (WVGA) 7"-TFT resistive
1280 x 800 Pixel(s) (WXGA) 7"- / 10.1"- / 12.1"-TFT PCAP

LED

350 cd/m², typical (adjustable)

40000 h

16.7 million colors

Projective-capacitive (PCAP)

analog resistive (polyester)

Yocto/Linux

Arm® Cortex®-A53, 4x 1.2 GHz

1 GB LPDDR3

Flash eMMC, 8 GB

2x USB host 2.0

1 x Ethernet (10/100 Mbps), RJ45

24 V DC ±20%

IP65 (front), IP20 (back)

0°C ... 50°C

Front installation

DIN EN 60068-2-6

DIN EN 60068-2-27

Class A product, see page 527

Ordering data

Type	Order No.	Pcs./Pkt.
WP 4000	1065546	1

Accessories

HMI SCB MOUNTING KIT 6	2701385	1
HMI SCB MOUNTING KIT 8	2701387	1

Web panels

Web panels for the WebVisit visualization software satisfy all requirements for basic operating and monitoring tasks.

Your advantages:

- Tailor-made for class 100 modular small-scale controllers
- Fast startup, thanks to Plug and Play
- Full graphic color display for clear representation
- Quick and user-friendly representation of your control variables using PC Worx Express and WebVisit software tools
- Multi-user operation, thanks to server/client structure
- Easy device replacement, as the project is saved on the PLC
- 4:3 or 16:9 display format



Display with resistive single-touch technology



Display data
Display lighting type
Color spectrum
Touch technology
Computer data
Operating system
Processor
RAM
Mass storage
Interfaces
Network
Power supply unit
General data
Degree of protection
Ambient temperature (operation)
Mounting type
Vibration (operation)
Shock
EMC note

Technical data
LED
65536 colors
analog resistive (polyester)
Windows® CE 5.0
Arm9™, 200 MHz
64 MB SDRAM
Flash, 32 MB
2x USB host 2.0
1 x Ethernet (10/100 Mbps), RJ45
24 V DC ±20%
IP65 (front), IP20 (back)
0°C ... 50°C
Front installation
DIN EN 60068-2-6
DIN EN 60068-2-27
Class A product, see page 527

Description
Web panel
- Display: 8.9 cm (3.5"), 320 x 240 Pixel(s) (QVGA)
- Display: 14.5 cm (5.7"), 320 x 240 Pixel(s) (QVGA)
- Display: 26.4 cm (10.4"), 800 x 600 Pixel(s) (SVGA)
- Display: 38.1 cm (15"), 1024 x 768 Pixel(s) (XGA)
Widescreen web panel
- Display: 17.8 cm (7"), 800 x 480 Pixel(s) (WVGA)
- Display: 22.9 cm (9"), 800 x 480 Pixel(s) (WVGA)

Ordering data			
Type	Order No.	Pcs./Pkt.	
WP 04T	2913632	1	
WP 06T	2913645	1	
WP 10T	2700934	1	
WP 15T	2700935	1	
WP 07T/WS	2700307	1	
WP 09T/WS	2700309	1	

Mounting kit, including hardware for installation
- panel installation
- panel installation

Accessories			
HMI SCB MOUNTING KIT 6	2701385	1	
HMI SCB MOUNTING KIT 8	2701387	1	

Touch panels

Touch panels for visualization projects with basic requirements. Visualize your user interfaces using the free Visu+ Express engineering software, and benefit from flexible connection to a wide range of third-party systems.

Your advantages:

- VISU+ RT integrated as standard in all BTP 2000 devices
- Connection to various control systems, thanks to a large number of available drivers and OPC UA communication
- Developed for basic applications with attractive price/performance ratio
- 16:9 display format



Touch panel for basic applications

Ex: 

Display data
Display lighting type
Display backlight MTBF
Color spectrum
Touch technology

Computer data
Operating system
Processor
RAM
Mass storage
Interfaces
Network
Power supply unit

General data
Degree of protection
Ambient temperature (operation)
Mounting type
Vibration (operation)
Shock
EMC note

Technical data

LED
20000 h
262144 colors
analog resistive (polyester)

Windows® CE 6.0
Arm9™ i.MX28, 454 MHz
128 MB DDR2 SDRAM
Flash, 512 MB
2x COM (RS-232/422/485)
1 x Ethernet (10/100 Mbps), RJ45
24 V DC ±15%

IP66 (on the front), IP20 (on the back)
0°C ... 50°C
Front installation
DIN EN 60068-2-6
DIN EN 60068-2-27
Class A product, see page 527

Ordering data

Description
Web panel
- Display: 10.92 cm (4.3"), 480 x 272 Pixel(s) (WQVGA)
- Display: 17.8 cm (7"), 800 x 480 Pixel(s) (WVGA)
- Display: 26.4 cm (10.4"), 800 x 480 Pixel(s) (WVGA)

Type	Order No.	Pcs./Pkt.
BTP 2043W	1050387	1
BTP 2070W	1046666	1
BTP 2102W	1046667	1

Touch panels

Powerful touch panels for visualizing demanding applications. Use the free Visu+ Express visualization software to design complex operating and monitoring interfaces and benefit from comprehensive features for all visualization requirements.

Thanks to the variety of drivers, benefit from flexible connection to a wide range of third-party systems.

Your advantages:

- Powerful and versatile, thanks to the new processor generation and integrated Visu+ visualization software
- Flexible connection, thanks to various drivers, even for third-party systems
- Robust and durable, thanks to the aluminum front
- Various display sizes and image formats
- Mobile system access possible via the Visu+ mobile app or HTML5 web client

Display data
Display lighting type
Touch technology
Computer data
Operating system
Processor
RAM
Mass storage
Interfaces
Network
Power supply unit
General data
Degree of protection
Ambient temperature (operation)
Mounting type
Vibration (operation)
Shock

Description
Touch panel with graphics-capable TFT display, 1 x Ethernet, 2 x USB, integrated AX OPC server and integrated runtime of the Visu+ visualization software
- Display: 10.92 cm (4.3"), 480 x 272 Pixel(s) (WQVGA)
- Display: 14.5 cm (5.7"), 320 x 240 Pixel(s) (QVGA)
- Display: 14.5 cm (5.7"), 640 x 480 Pixel(s) (VGA)
- Display: 17.8 cm (7"), 800 x 480 Pixel(s) (WVGA)
- Display: 22.9 cm (9"), 800 x 480 Pixel(s) (WVGA)
- Display: 26.4 cm (10.4"), 800 x 600 Pixel(s) (SVGA)
- Display: 30.7 cm (12.1"), 1280 x 800 Pixel(s) (WXGA)
- Display: 30.7 cm (12.1"), 800 x 600 Pixel(s) (SVGA)
- Display: 38.1 cm (15"), 1024 x 768 Pixel(s) (XGA)
- Display: 39.12 cm (15.4"), 1280 x 800 Pixel(s) (WXGA)

Mounting kit , including hardware for installation
- panel installation
- panel installation



Display with resistive single-touch technology



Technical data
LED
analog resistive (polyester)
Windows® Embedded Compact 7
Arm® Cortex®-A8, 800 MHz
512 MB RAM
Flash, 1 GB
2x USB host 2.0
1 x Ethernet (10/100 Mbps), RJ45
24 V DC ±20%
IP65 (front), IP20 (back)
0°C ... 50°C
Front installation
DIN EN 60068-2-6
DIN EN 60068-2-27

Ordering data		
Type	Order No.	Pcs./Pkt.
TP 3043W	2402629	1
TP 3057Q	2400452	1
TP 3057V	2400453	1
TP 3070W	2400454	1
TP 3090W	2402630	1
TP 3105S	2400455	1
TP 3120W	2400457	1
TP 3121S	2400456	1
TP 3150S	2400458	1
TP 3154W	2402631	1

Accessories		
HMI SCB MOUNTING KIT 6	2701385	1
HMI SCB MOUNTING KIT 8	2701387	1

Touch panels

Using the HMIs for the Visu+ visualization software, you can optimally reproduce your systems and processes. The devices have a new design and projected-capacitive (PCAP) touch displays with multi-touch function. The robust interface and various display sizes give you even more flexibility when it comes to system planning.

Your advantages:

- Robust and sturdy, thanks to glass front suitable for industrial use
- Integrated Visu+ visualization software
- Flexible connection, thanks to various drivers, even for third-party systems
- Fast response and display refresh, thanks to powerful processor
- Mobile system access possible via the Visu+ mobile app or HTML5 web client



Display with multi-touch function



Display data
Display lighting type
Touch technology
Computer data
Operating system
Processor
RAM
Mass storage
Interfaces
Network
Power supply unit
General data
Degree of protection
Ambient temperature (operation)
Mounting type
Vibration (operation)
Shock

Technical data
LED
Projective-capacitive (PCAP)
Windows® Embedded Compact 7
Arm® Cortex®-A8, 1000 MHz
512 MB LPDDR RAM
NAND-Flash, 1 GB
2x USB host 2.0
1 x Ethernet (10/100 Mbps), RJ45
24 V DC ±20%
IP65 (front), IP20 (back)
0°C ... 50°C
Front installation
DIN EN 60068-2-6
DIN EN 60068-2-27

Description
Touch panel with graphics-capable TFT display, 1 x Ethernet, 2 x USB, and integrated runtime of the Visu+ visualization software
- Display: 17.8 cm (7"), 800 x 480 Pixel(s) (WVGA)
- Display: 22.9 cm (9"), 800 x 480 Pixel(s) (WVGA)
- Display: 30.7 cm (12.1"), 1280 x 800 Pixel(s) (WXGA)
- Display: 39.6 cm (15.6"), 1366 x 768 Pixel(s) (WXGA)
- Display: 47.0 cm (18.5"), 1366 x 768 Pixel(s) (WXGA)

Ordering data		
Type	Order No.	Pcs./Pkt
TP 3070W/P	2403459	1
TP 3090W/P	2403460	1
TP 3120W/P	2403461	1
TP 3156W/P	2403462	1
TP 3185W/P	2403862	1

Mounting kit, including hardware for installation
- panel installation
- panel installation

Accessories		
HMI SCB MOUNTING KIT 6	2701385	1
HMI SCB MOUNTING KIT 8	2701387	1

Box PCs

Box PCs are compact, easy to maintain, and powerful. They are particularly impressive when it comes to demanding applications. These include measuring, controlling, and testing process and machine data or distributed visualizations in conjunction with remote monitors. Various mounting options and scalable performance make box PCs the ideal platform for machine building and systems manufacturing.

Your advantages:

- High system availability, thanks to a fanless design which is suitable for industrial applications and the absence of moving parts
- Versatile use, thanks to various mounting options, e.g., on the DIN rail
- Energy-efficient Intel® Atom™ to Core™ i7 processors
- Large-scale compatibility, thanks to open IT standards, numerous interfaces and operating systems
- Particularly easy to maintain, thanks to easily accessible components in the IPC housing

Additional features:

- Configurable based on customer requirements
- System protection through the use of embedded operating systems

Notes:

You can find additional information about industrial PCs and the corresponding accessories in the product area of our website at phoenixcontact.net/products.



Configurable box PC



Technical data

Computer data	
Operating system (configuration option)	without operating system Windows® 7 Professional SP1 (64-Bit), German Windows® 7 Professional SP1 (64-bit), English Windows® 7 Ultimate SP1 (64 bit), Multi-language Windows® 7 Ultimate SP1 (32-bit), Multi-language Windows® 7 Professional SP1 (32-bit), English Windows® 7 Professional SP1 (32-bit), German Windows® Embedded Standard 7 SP1 (32-bit), Multi-language Windows® Embedded Standard 7 SP1 (64-bit), Multi-language Windows® 10 IoT Enterprise LTSC 2015 (32-bit), Multi-language Windows® 10 IoT Enterprise LTSC 2015 (64-bit), Multi-language
RAM (configuration option)	4 GB DDR3 SODIMM 8 GB DDR3 SODIMM 16 GB DDR3 SODIMM
Mass storage (configuration option)	without mass storage SSD (SLC), 4 GB SSD (SLC), 8 GB SSD (SLC), 16 GB SSD (SLC), 32 GB 2.5" HDD SATA, 320 GB 2.5" SSD (MLC), 240 GB 2.5" SSD (MLC), 480 GB
Raid system	0, 1
Interfaces	1x COM (RS-232/422/485) 2x USB 2.0 2x USB 3.0
Optional interfaces (configuration option)	Without optional interface 2x COM (RS-232), 1x COM (RS-232/422/485) 2x Ethernet, 1x audio out (3.5 mm), 1x audio in (3.5 mm)
Slots	PCI/PCIe optional
Monitor output	2x DisplayPort
Network	2x Ethernet (10/100/1000 Mbps), RJ45
Power supply unit	24 V DC ±20%
General data	
Degree of protection	IP30
Ambient temperature (operation)	0°C ... 45°C (with HDD) -20°C ... 60°C (with SSD)
Permissible humidity (operation)	5% ... 95% (non-condensing)
Mounting type (configuration option)	Bookshelf mounting Wall mounting
Vibration (operation)	DIN EN 60068-2-6
Shock	15g, 11 ms in accordance with IEC 60068-2-27
EMC note	Class A product, see page 527

Ordering data		
Type	Order No.	Pcs./Pkt.
VL2 BPC 1000	2403046	1
VL2 BPC 2000	2400332	1
VL2 BPC 3000	2400492	1
VL2 BPC 7000	2400333	1
VL2 BPC 9000	2400499	1

Box PCs

new

The new generation of compact box PCs is optimized for automation applications in the lower price segment.

The IPCs are suitable for assembly stations, warehousing and logistics, for production data and energy data collection, and for production networking.

Your advantages:

- High system availability, thanks to a fanless design which is suitable for industrial applications and the absence of moving parts
- Long-term availability, thanks to the latest 7th generation Intel processors
- Space saving, thanks to new M.2 storage technology
- Wireless connection, thanks to optional WLAN module (WLAN-capable)

Notes:

You can find additional information about industrial PCs and the corresponding accessories in the product area of our website at phoenixcontact.net/products.



Configurable box PC



Computer data	Windows® 10 IoT Enterprise LTSC 2016 (64-bit), Multi-language
Operating system (configuration option)	
RAM (configuration option)	4 GB DDR3 SODIMM
Mass storage (configuration option)	M.2 SSD, 128 GB
Interfaces	1x COM (RS-232/422/485) 2x COM (RS-232) 2x USB 2.0 2x USB 3.0 2x DisplayPort 2x Ethernet (10/100/1000 Mbps), RJ45
Monitor output	24 V DC ±20%
Network	
Power supply unit	
General data	
Degree of protection	IP20
Ambient temperature (operation)	0°C ... 50°C
Permissible humidity (operation)	5% ... 95% (non-condensing)
Mounting type (configuration option)	Wall mounting DIN rail mounting
Vibration (operation)	DIN EN 60068-2-6
Shock	15g, 11 ms in accordance with IEC 60068-2-27
EMC note	Class A product, see page 527

Ordering data			
Description	Type	Order No.	Pcs./Pkt.
Industrial PC			
- with Intel® Celeron® N3350 technology (dual-core)	BL2 BPC 1000	2404777	1
- with Intel® Pentium® N4200 technology (quad-core)	BL2 BPC 2000	2404844	1
- with Intel® Core™ i5-7442EQ technology (quad-core)	BL2 BPC 7000	1016240	1

Box PCs

Box PCs are compact, easy to maintain, and powerful. They are particularly impressive when it comes to demanding applications. These include measuring, controlling, and testing process and machine data or distributed visualizations in conjunction with remote monitors. Various mounting options and scalable performance make box PCs the ideal platform for machine building and systems manufacturing.

Your advantages:

- High system availability, thanks to a fanless design which is suitable for industrial applications and the absence of moving parts
- Powerful Intel® Celeron® or Core™-i3 processors
- Large-scale compatibility, thanks to open IT standards, numerous interfaces and operating systems
- Can be extended via two PCI slots
- Particularly easy to maintain, thanks to easily accessible components in the IPC housing
- Configurable based on customer requirements

Notes:

You can find additional information about industrial PCs and the corresponding accessories in the product area of our website at phoenixcontact.net/products.



Configurable box PC



Technical data

Computer data		without operating system Windows® 7 Ultimate SP1 (32-bit), Multi-language Windows® 7 Ultimate SP1 (64 bit), Multi-language Windows® 7 Professional SP1 (32-bit), German Windows® 7 Professional SP1 (64-bit), German Windows® 7 Professional SP1 (32-bit), English Windows® 7 Professional SP1 (64-bit), English Windows® 7 Professional SP1 (32-bit), Chinese Windows® 7 Professional SP1 (64-bit), Chinese Windows® Embedded Standard 7 SP1 (32-bit), Multi-language Windows® Embedded Standard 7 E SP1 (32-bit) Windows® 10 IoT Enterprise LTSC 2015 (32-bit), Multi-language Windows® 10 IoT Enterprise LTSC 2015 (64-bit), Multi-language Windows® 10 IoT Enterprise LTSC 2016 (32-bit), Multi-language Windows® 10 IoT Enterprise LTSC 2016 (64-bit), Multi-language
Operating system (configuration option)		
RAM (configuration option)		4 GB DDR3 SODIMM 8 GB DDR3 SODIMM 16 GB DDR3 SODIMM
Mass storage (configuration option)		without mass storage CompactFlash®, 1 GB CompactFlash®, 2 GB CompactFlash®, 4 GB CompactFlash®, 8 GB CompactFlash®, 16 GB CompactFlash®, 32 GB SSD (SLC), 16 GB SSD (SLC), 32 GB 2.5" HDD SATA, 320 GB 2.5" HDD SATA, 500 GB 2.5" SSD (MLC), 150 GB 2.5" SSD (MLC), 240 GB 2.5" SSD (MLC), 480 GB
Interfaces		1x COM (RS-232/422/485) 3x USB 2.0 1x USB 3.0
Slots		without slots 2x PCI
Monitor output		1x DisplayPort 1x DVI-D
Network		2x Ethernet (10/100/1000 Mbps), RJ45
Power supply unit		24 V DC ±20%
General data		
Dimensions	W / H / D	265 mm / 207 mm / 87 mm
Degree of protection		IP20
Ambient temperature (operation)		-20°C ... 50°C (configuration options can affect the operating temperature. See user manual for details)
Permissible humidity (operation)		5% ... 95% (non-condensing)
Mounting type (configuration option)		Bookshelf mounting Wall mounting
Vibration (operation)		IEC 60068-2-27
Shock		15g, 11 ms impulse in accordance with IEC 60068-2-27
EMC note		Class A product, see page 527

Ordering data			
Type	Order No.	Pcs./Pkt	
VL BPC 2000	2402759	1	
VL BPC 3000	2400183	1	

Description	
Industrial PC	
- with Intel® Celeron® N2930 technology	
- with Intel® Core™ i3-4010U technology	

Rackmount PCs

The powerful rackmount PCs in standardized 19" format provide the right solution for demanding applications in your industry.

Your advantages:

- Tailored to the 19" rack format with 2 RU or 4 RU (Rack Units)
- Can be extended via PCI/PCIe slots
- High system availability and data security, thanks to RAID support (0/1/5)
- Easy maintenance, thanks to 2 or 3 hot-swappable drives
- Increased security, thanks to lockable front flap
- Easy access to air filters



Rackmount PC with 2 RU



Rackmount PC with 4 RU



Technical data			Technical data		
Computer data			Computer data		
Processor (configuration option)			Intel® Core™ i7-4770S 3.90 GHz Intel® Core™ i3-4330TE 2.40 GHz		
RAM (configuration option)			16 GB DDR3 SODIMM 8 GB DDR3-1066 SODIMM		
Mass storage (configuration option)			without mass storage 1 TB HDD 3.5" SATA 2 TB HDD 3.5" SATA 4 TB HDD 3.5" SATA		
Raid system			0, 1		
Interfaces			1x COM (RS-232/422/485) 2x COM (RS-232) 4x USB 2.0 2x USB 3.0		
Slots			optional		
Extended functions			3x PCI 1x PCIe x4 1x PCIe x16 1x DVI-D		
Monitor output			2x Ethernet (10/100/1000 Mbps), RJ45		
Network			110/220 V AC		
Power supply unit			110/220 V AC		
General data			General data		
Degree of protection			IP20		
Ambient temperature (operation)			0°C ... 55°C (configuration options can affect the operating temperature. See user manual for details)		
Permissible humidity (operation)			5% ... 95% (non-condensing)		
Mounting type			Installation in the control cabinet (19")		
Vibration (operation)			DIN EN 60068-2-6		
Shock			15g in all directions in acc. with IEC 60068-2-27		
Ordering data			Ordering data		
Description			Type		
Rackmount PC			Order No.		
- 19-inch, 2U			Pcs./Pkt.		
- 19-inch, 4U			BL RACKMOUNT 2U		
			2400063		
			1		
			BL RACKMOUNT 4U		
			2400064		
			1		
Accessories			Accessories		
Mass storage			IPC 3.5 1TB HDD		
- 1 TB HDD 3.5"			2403835		
- 2 TB HDD 3.5"			2403836		
- 4 TB HDD 3.5"			2403837		
Redundant power supply for the BL RACKMOUNT 2U			BL RM 2U REDUNDANT 350W PS		
			2404379		
			4		
			BL RM 2U REDUNDANT 350W PS		
			2404379		
			4		

KVM extender

The **VL KVM EXTENDER** enables data transmission between an industrial PC and an operator panel over a distance of up to 90 m. With just one standard Ethernet cable, you can transmit video, audio, and USB signals between a remote operator panel and a control cabinet PC without losses.

Your advantages:

- Flexible, thanks to remote operating solutions up to 90 m
- Cost-effective, thanks to elimination of cable and mounting costs
- Increased system availability, thanks to the use of purely passive displays
- Industry-capable, thanks to an extended temperature range of -20°C to +50°C
- Fast startup, thanks to a solution consisting purely of hardware



Computer data		Technical data		
Interfaces		1x USB 2.0, type B (VL KVM EXTENDER (TX)) 3x USB 2.0, type A (VL KVM EXTENDER (RX)) 1x micro-B USB 1x RJ45 1x DisplayPort 1x DVI-D 24 V DC ±20%		
Monitor output				
Power supply unit				
General data				
Dimensions	W / H / D	150 mm / 80 mm / 43 mm		
Degree of protection		IP20		
Ambient temperature (operation)		-20°C ... 50°C		
Permissible humidity (operation)		5% ... 95% (relative humidity, non-condensing)		
Mounting type		DIN rail mounting		
Shock		15g, 11 ms in accordance with IEC 60068-2-27		
EMC note		Class A product, see page 527		
Ordering data				
Description		Type	Order No.	Pcs./Pkt.
KVM extender		VL KVM EXTENDER	2404770	1

Software PLC for installation on IPCs

Industrial PCs for visualizing and operating processes are often only utilized to a limited extent. Make use of these available resources and also transform your industrial PC into a full-fledged PLC.

Depending on the performance requirements, choose between **PC Worx SRT** with statistically guaranteed response times for small to medium tasks and **PC Worx RT Basic** for complex automation with real-time requirements.

Your advantages:

- Stable and reliable, thanks to operating system expansion with PC Worx RT Basic
- Easy and inexpensive visualization, thanks to integrated web server
- Maximum Ethernet openness, as all common protocols are supported



**Software PLC
with real-time extension**



**Software PLC
without real-time extension**

	Technical data	Technical data
Hardware requirements		
Processor	min. Intel® Core™2 Duo	min. Intel® Atom™
Main memory (RAM)	min. 2 GByte	min. 512 Mbyte
Hard disk memory	min. 1 GByte	min. 1 GByte
Interfaces	Ethernet port, USB port	Ethernet Port
Operating equipment	Keyboard, mouse recommended	Keyboard, mouse recommended
Monitor resolution	XGA (1024 x 768)	XGA (1024 x 768)
Software requirements		
Operating system	Windows® 7 (32-Bit/64-Bit) Windows® 8.1 (32-Bit/64-Bit) Windows® Embedded Standard 7 Windows® Embedded 2009 Windows® 10 (32-Bit/64-Bit) Internet Explorer Version 8 or later	Windows® 7 (32-Bit/64-Bit) Windows® 8.1 (32-Bit/64-Bit) Windows® Embedded Standard 7 Windows® Embedded 2009 Windows® 10 (32-Bit/64-Bit) Internet Explorer Version 8 or later
Supported browsers		
Basic functions	Complete PLC PROFINET controller and device functionality only in conjunction with a Valueline PC INTERBUS functionality only in conjunction with an INTERBUS master controller board Integration of Modbus/TCP in the firmware	Complete PLC Non-real-time-capable software PLC for installation on a standard PC with integrated Modbus/TCP, plus PROFINET controller and device functionality
IEC 61131 runtime system		
Programmable under	PC Worx in IEC 61131	PC Worx in IEC 61131
Processing speed	0.001 ms (1 K mixed instructions, Intel® Core™2 Duo 1.5 GHz) 0.7 µs (1 K bit instructions, Intel® Core™2 Duo 1.5 GHz)	5.5 µs (1 K mixed instructions, Intel® Atom™ Z510PT) 4 µs (1 K bit instructions, Intel® Atom™ Z510PT)
Program memory	8 Mbyte	1 Mbyte
Mass storage	16 Mbyte	1 Mbyte
Retentive mass storage	240 kByte	48 kByte
Number of data blocks	depends on mass storage	depends on mass storage
Number of timers, counters	depends on mass storage	depends on mass storage
Number of control tasks	16	8
	Ordering data	Ordering data
Description	Type	Type
Software PLC	PC WORX RT BASIC	PC WORX SRT
	2700291	2701680
	1	1
	Accessories	Accessories
PC controller board	IBS PCI SC/I-T	
AX OPC SERVER, communication interface for OPC-compatible visualization with PC Worx-based controllers	AX OPC SERVER	AX OPC SERVER
	2725260	2985945
	2985945	
	1	1
Industrial PC	See page 474 onwards	See page 474 onwards

Valueline panel PCs

The new generation of Valueline panel PCs combines the latest technology and robust industrial design to create a powerful operation and monitoring device. With various display sizes and numerous configuration options, the new Valueline panel PC is the tailor-made IPC solution.

Your advantages:

- Multitouch capability with projected capacitive touch-screen technology
- Extremely robust, thanks to the industrial, fanless design
- Maintenance friendly with access to all important components

Notes:

You can find additional information about industrial PCs and the corresponding accessories in the product area of our website at phoenixcontact.net/products.



**Configurable panel PC
with Intel® Atom™ E3845 technology**



Ex:

Display data
Display lighting type
Computer data
Operating system (configuration option)
Processor
RAM
Interfaces
Optional interfaces (configuration option)
Slots
Monitor output
Network
Power supply unit
General data
Degree of protection
Ambient temperature (operation)
Permissible humidity (operation)
Mounting type
Vibration (operation)
Shock
EMC note

Technical data
LED
without operating system Windows® 7 Professional SP1 (64-Bit), German Windows® 7 Professional SP1 (64-bit), English Windows® 7 Ultimate SP1 (64 bit), Multi-language Windows® 7 Ultimate SP1 (32-bit), Multi-language Windows® 7 Professional SP1 (32-bit), English Windows® 7 Professional SP1 (32-bit), German Windows® Embedded Standard 7 SP1 (32-bit), Multi-language Windows® Embedded Standard 7 SP1 (64-bit), Multi-language Windows® 10 IoT Enterprise LTSC 2015 (32-bit), Multi-language Windows® 10 IoT Enterprise LTSC 2015 (64-bit), Multi-language Intel® Atom™ E3845 1.91 GHz 4 GB DDR3 1x COM (RS-232/422/485) 2x USB 2.0 1x USB 3.0 Without optional interface 1x COM (RS-232), 1x COM (RS-485), 2x CAN 1x COM (RS-232), 1x COM (RS-485) 1x SD 1x DisplayPort 2x Ethernet (10/100/1000 Mbps), RJ45 24 V DC ±20%
IP66 (front), IP30 (back) 0°C ... 50°C 20% ... 85% (non-condensing) Front installation 1g, in accordance with EN 60068-2-6 DIN EN 60068-2-27 Class A product, see page 527

Description
Industrial panel PC (PPC) with projected-capacitive touch screen (4-touch control). Configurable options for mass storage.
- Display: 17.8 cm (7"), 800 x 480 Pixel(s) (WVGA)
- Display: 22.9 cm (9"), 800 x 480 Pixel(s) (WVGA)
- Display: 30.7 cm (12.1"), 1280 x 800 Pixel(s) (WXGA)
Industrial panel PC (PPC) with projected capacitive touch screen (ten-point touch). Configurable options for display size, screen resolution, and mass storage.

Ordering data		
Type	Order No.	Pcs./Pkt.
VL2 PPC7 1000	2403708	1
VL2 PPC9 1000	2403709	1
VL2 PPC12 1000	2403710	1
VL2 PPC 1000	2403047	1

Valueline panel PCs

The new generation of Valueline panel PCs combines state-of-the-art technology and robust industrial design into one high-performance operation and monitoring device. Various display sizes and numerous configuration options make the Valueline panel PC the tailor-made IPC solution.

Your advantages:

- Multitouch capability with projected capacitive touch-screen technology
- Extremely robust, thanks to the industrial, fanless design
- Maintenance friendly with access to all important components
- Can be extended via PCI/PCIe slot
- High data security, thanks to 2 forms of mass storage and RAID support

Notes:

You can find additional information about industrial PCs and the corresponding accessories in the product area of our website at phoenixcontact.net/products.



Configurable panel PC



Ex:

Technical data

Display data	
Display (configuration option)	39.6 cm/15.6" TFT 47.0 cm / 18.5" TFT 54.6 cm/21.5" TFT
Screen resolution	1366 x 768 Pixel(s) (WXGA) 15.6" TFT; 18.5" TFT 1920 x 1080 Pixel(s) (Full HD)
Display lighting type	LED
Brightness	300 cd/m², typical (adjustable)
Display backlight MTBF	> 50000 h (dependent on configuration)
Color spectrum	16.7 million colors
Touch technology	projective-capacitive, ten-touch control
Computer data	
Operating system (configuration option)	without operating system Windows® 7 Professional SP1 (64-Bit), German Windows® 7 Professional SP1 (64-bit), English Windows® 7 Ultimate SP1 (64 bit), Multi-language Windows® 7 Ultimate SP1 (32-bit), Multi-language Windows® 7 Professional SP1 (32-bit), English Windows® 7 Professional SP1 (32-bit), German Windows® Embedded Standard 7 SP1 (32-bit), Multi-language Windows® Embedded Standard 7 SP1 (64-bit), Multi-language Windows® 10 IoT Enterprise LTSC 2015 (32-bit), Multi-language Windows® 10 IoT Enterprise LTSC 2015 (64-bit), Multi-language
RAM (configuration option)	4 GB DDR3 SODIMM 8 GB DDR3 SODIMM
Mass storage (configuration option)	without mass storage SSD (SLC), 4 GB SSD (SLC), 8 GB SSD (SLC), 16 GB SSD (SLC), 32 GB 2.5" HDD SATA, 320 GB 2.5" SSD (MLC), 240 GB 2.5" SSD (MLC), 480 GB
Raid system	without RAID system
Interfaces	1x COM (RS-232/422/485) 4x USB 2.0
Optional interfaces (configuration option)	without optional interface 2x COM (RS-232), 1x COM (RS-232/422/485) 2x Ethernet, 1x audio out (3.5 mm), 1x audio in (3.5 mm)
Slots	PCI/PCIe optional
Monitor output	1x DisplayPort
Network	2x Ethernet (10/100/1000 Mbps), RJ45
Power supply unit	24 V DC ±20%
General data	
Degree of protection	IP66 (front), IP30 (back)
Ambient temperature (operation)	0°C ... 45°C (with HDD) -20°C ... 60°C (with SSD)
Permissible humidity (operation)	5% ... 95% (non-condensing)
Mounting type	Front installation
Vibration (operation)	DIN EN 60068-2-6
Shock	15g, 11 ms in accordance with IEC 60068-2-27
EMC note	Class A product, see page 527

Ordering data

Description	Type	Order No.	Pcs./Pkt.
Industrial panel PC (PPC) with projected-capacitive touch screen. Configurable options for display size, RAM, and mass storage.			
- with Intel® Celeron® N2930 technology	VL2 PPC 2000	2400334	1
- with Intel® Core™ i3-4010U technology	VL2 PPC 3000	2400498	1
- with Intel® Core™ i5-4300U technology	VL2 PPC 7000	2400346	1
- with Intel® Core™ i7-6822EQ technology	VL2 PPC 9000	2400500	1

Basicline panel PCs

The new generation of robust panel PCs is optimized for automation applications in the lower price segment.

The IPCs are suitable for assembly stations, warehousing and logistics, for production data and energy data collection, and for production networking.

Your advantages:

- High system availability, thanks to a fanless design which is suitable for industrial applications and the absence of moving parts
- Easy integration into existing systems, thanks to proven design with unchanged dimensions
- Long-term availability, thanks to the latest 7th generation Intel processors
- Space saving, thanks to new M.2 storage technology
- Wireless connection, thanks to optional WLAN module (WLAN-capable)

Notes:

You can find additional information about industrial PCs and the corresponding accessories in the product area of our website at phoenixcontact.net/products.

new



Configurable panel PC



Technical data

Technical data	
Display data	
Display (configuration option)	30.7 cm/12.1" TFT 38.1 cm/15" TFT 43.0 cm/17" TFT
Screen resolution	1280 x 1024 Pixel(s) (SXGA) 17"-TFT 1024 x 768 Pixel(s) (XGA) 12.1" - / 15"-TFT
Display lighting type	LED
Brightness	Dependent on configuration
Display backlight MTBF	50000 h
Color spectrum	Dependent on configuration
Touch technology	Analog resistive (polyester)
Computer data	
Operating system (configuration option)	without operating system Windows® 10 IoT Enterprise LTSC 2016 (64-bit), Multi-language
Processor (configuration option)	Intel® Celeron® N3350 1.10/2.40 GHz
RAM (configuration option)	4 GB DDR3 SODIMM
Mass storage (configuration option)	without mass storage M.2 SSD, 128 GB
Interfaces	1x COM (RS-232/422/485) 2x COM (RS-232) 2x USB 2.0 2x USB 3.0 2x DisplayPort 2x Ethernet (10/100/1000 Mbps), RJ45 24 V DC ±20%
Monitor output	
Network	
Power supply unit	
General data	
Degree of protection	IP20
Ambient temperature (operation)	0°C ... 50°C
Permissible humidity (operation)	5% ... 95% (non-condensing)
Mounting type	Front installation
Vibration (operation)	DIN EN 60068-2-6
Shock	15g, 11 ms in accordance with IEC 60068-2-27
EMC note	Class A product, see page 527

Ordering data

Description	Type	Order No.	Pcs./Pkt.
Panel PC			
- with Intel® Celeron® N3350 technology (dual-core)	BL2 PPC 1000	2404845	1
- with Intel® Pentium® N4200 technology (quad-core)	BL2 PPC 2000	2404846	1
- with Intel® Core™ i5-7442EQ technology (quad-core)	BL2 PPC 7000	1016236	1

Valueline panel PCs

Panel PCs with analog-resistive touch technology combine the advantages of a modern industrial PC with the operation and monitoring functions of a touch monitor. Typically installed in the front of the control cabinet, they provide monitoring and control directly on site.

Features:

- High system availability, thanks to a fanless design or convection booster, suitable for industrial applications and absence of moving parts
- Powerful Intel® Celeron® and Core™-i processors
- Large-scale compatibility with open IT standards, numerous interfaces and operating system options
- Display sizes from 12" (SVGA) to 24" (Full HD)
- High graphic performance with Intel HD graphics 4000

Notes:

You can find additional information about industrial PCs and the corresponding accessories in the product area of our website at phoenixcontact.net/products.



Configurable panel PC



Display data

Display (configuration option)

Screen resolution

Brightness

Display backlight MTBF

Touch technology

Computer data

RAM (configuration option)

Mass storage (configuration option)

Interfaces

Network

Power supply unit

General data

Degree of protection

Ambient temperature (operation)

Permissible humidity (operation)

Mounting type

Vibration (operation)

Shock

EMC note

Technical data

30.7 cm/12.1" TFT
30.7 cm / 12.1" TFT FRONT USB
38.1 cm / 15" TFT
38.1 cm / 15" TFT FRONT USB
38.1 cm / 15" TFT STAINLESS
38.1 cm / 15" TFT USB BK
43.0 cm/17" TFT
43.0 cm / 17" TFT FRONT USB
47.0 cm / 18.5" TFT
48.3 cm / 19" TFT
48.3 cm / 19" TFT FRONT USB
54.6 cm / 21.5" TFT
60.9 cm / 24" TFT FRONT USB
800 x 600 Pixel(s) (SVGA)
1024 x 768 Pixel(s) (XGA)
1280 x 1024 Pixel(s) (SXGA)
1366 x 768 Pixel(s) (WXGA)
1920 x 1080 Pixel(s) (Full HD)
Dependent on configuration
Dependent on configuration
analog resistive (polyester)
4 GB DDR3 SODIMM
8 GB DDR3 SODIMM
16 GB DDR3 SODIMM
without mass storage
CompactFlash®, 1 GB
CompactFlash®, 2 GB
CompactFlash®, 4 GB
CompactFlash®, 8 GB
CompactFlash®, 16 GB
CompactFlash®, 32 GB
SSD (SLC), 16 GB
SSD (SLC), 32 GB
2.5" HDD SATA, 320 GB
2.5" HDD SATA, 500 GB
2.5" SSD (MLC), 150 GB
2.5" SSD (MLC), 240 GB
2.5" SSD (MLC), 480 GB
1x COM (RS-232/422/485)
3x USB 2.0
1x USB 3.0
2x Ethernet (10/100/1000 Mbps), RJ45
24 V DC ±20%
IP65 (front), IP20 (back)
-20°C ... 50°C (configuration options can affect the operating temperature. See user manual for details)
5% ... 95% (non-condensing)
Front installation
IEC 60068-2-27
15g, 11 ms impulse in accordance with IEC 60068-2-27
Class A product, see page 527

Ordering data

Description

Industrial panel PC (PPC) with resistive touch screen.
Configurable options for display size, memory and mass storage.

- with Intel® Celeron® N2930 technology
- with Intel® Core™ i3-4010U technology

Type	Order No.	Pcs./Pkt.
VL PPC 3000	2400184	1
VL PPC 2000	2402760	1

IP65 panel PCs

The panel PCs in the Designline range combine high-performance technology and an attractive design. They are narrow, feature IP65 protection and multi-touch capability, and are always close to the action as they can be installed quickly and easily directly on the machine.

Thanks to their fanless and energy-efficient design, they are the ideal solution for future operating concepts in industrial systems: easy maintenance, custom configuration, and robust.

Additional features:

- Single or multi-touch screen
- Energy-efficient Intel® Core™ i7 processors
- Can be configured individually
- Fully enclosed housing with IP65 protection
- Extended temperature range (-20°C ... +45°C)
- User-friendly handling, thanks to the attractive and practical industrial design
- Easy access to all important components

Notes:

You can find additional information about industrial PCs and the corresponding accessories in the product area of our website at phoenixcontact.net/products.



Configurable panel PC



Technical data

Display data	LED
Display lighting type	projective-capacitive, ten-touch control
Touch technology	
Computer data	without operating system
Operating system (configuration option)	Windows® 7 Professional SP1 (32-bit), German
	Windows® 7 Professional SP1 (32-bit), English
	Windows® 7 Professional SP1 (64-bit), German
	Windows® 7 Professional SP1 (64-bit), English
	Windows® 7 Ultimate SP1 (64-bit), Multi-language
	Windows® 7 Ultimate SP1 (32-bit), Multi-language
	Windows® Embedded Standard 7 SP1 (32-bit), Multi-language
	Windows® Embedded Standard 7 SP1 (64-bit), Multi-language
	Windows® 10 IoT Enterprise LTSC 2015 (32-bit), Multi-language
	Windows® 10 IoT Enterprise LTSC 2015 (64-bit), Multi-language
	Intel® Core™ i7-4650U 3.30 GHz
	4 GB DDR3 SODIMM
	8 GB DDR3 SODIMM
	12 GB DDR3 SODIMM
	without mass storage
	SSD (SLC), 4 GB
	SSD (SLC), 8 GB
	SSD (SLC), 16 GB
	SSD (SLC), 32 GB
	2.5" SSD (MLC), 80 GB
	2.5" SSD (MLC), 160 GB
	2.5" HDD SATA, 320 GB
	1x COM (RS-232/422/485)
	4x USB 2.0
	1x USB 3.0
	1x Audio
	without slots
	without
	2x Ethernet (10/100/1000 Mbps), RJ45
	24 V DC ±20%
Processor	IP65
RAM (configuration option)	0°C ... 45°C (with HDD)
	-20°C ... 45°C (with SSD)
	5% ... 95% (non-condensing)
	VESA MIS-D, 100
	1g with SSD, 0.5g with HDD, in accordance with EN 60068-2-6
	15g, 11 ms in accordance with IEC 60068-2-27
	Class A product, see page 527
Mass storage (configuration option)	
Interfaces	
Slots	
Monitor output	
Network	
Power supply unit	
General data	
Degree of protection	
Ambient temperature (operation)	
Permissible humidity (operation)	
Mounting type	
Vibration (operation)	
Shock	
EMC note	

Ordering data

Description	Type	Order No.	Pcs./Pkt.
Panel PC			
- Display: 38.1 cm (15"), 1024 x 768 Pixel(s) (XGA)	DL PPC15M 7000	2400017	1
- Display: 47.0 cm (18.5"), 1366 x 768 Pixel(s) (WXGA)	DL PPC18.5M 7000	2400015	1
- Display: 54.6 cm (21.5"), 1920 x 1080 pixels (Full HD)	DL PPC21.5M 7000	2400016	1

Monitors with touch function

The monitors with a modern industrial design and with multi-touch display are suitable for operating concepts where the processor unit and display unit are physically separated. Thanks to the different display sizes, you will find the right monitor for your application.

Your advantages:

- System enhanced by an attractive design
- Robust and sturdy, thanks to glass front suitable for industrial use
- Implementation of state-of-the-art operating concepts, thanks to multi-touch support
- Easy integration into existing systems, thanks to standardized interfaces



**Flat panel monitor with
projected-capacitive multi-touch screen**



Display data
Display lighting type
Brightness
Display backlight MTBF
Color spectrum

Touch technology

Power supply unit

General data

Degree of protection
Ambient temperature (operation)
Permissible humidity (operation)
Mounting type
Vibration (operation)
Shock
EMC note

Technical data

LED
300 cd/m², typical (adjustable)
> 50000 h
16.7 million colors

projective-capacitive, ten-touch control

24 V DC

IP65 (front), IP20 (back)
-10°C ... 60°C
10% ... 90% (non-condensing)
VESA MIS-D, 100
1g
15g, 11 ms impulse
Class A product, see page 527

Ordering data

Description

Flat panel monitor with projected-capacitive multi-touch screen

- Display: 39.6 cm (15.6"), 1366 x 768 Pixel(s) (WXGA)
- Display: 46.9 cm (18.5"), 1366 x 768 Pixel(s) (WXGA)
- Display: 54.6 cm (21.5"), 1920 x 1080 pixels (Full HD)

Type

Order No.

Pcs./Pkt.

BL FPM 15.6

2402980

1

BL FPM 18.5

2402981

1

BL FPM 21.5

2400515

1

Tablet PCs

Tablet PCs suitable for industrial use are the ideal solution for working on the go indoors and outdoors. The new generation offers improved processor power and Full HD displays. Thanks to optimized energy efficiency, you can operate the devices for up to eight hours.

Your advantages:

- Work on the go without interruption, as the battery can be replaced during operation
- Large visualization, thanks to 13.3" display with Full HD resolution
- Optimum performance for every application, thanks to Intel® Celeron® and Intel® Core™ processors
- Stable connections via WLAN and Bluetooth
- Sound and proven handling, thanks to enclosed monocoque frame

Notes:

You can find additional information about industrial PCs and the corresponding accessories in the product area of our website at phoenixcontact.net/products.



Configurable tablet PC

Display data
Display
Screen resolution
Display lighting type
Display backlight MTBF
Touch technology
Computer data
Operating system (configuration option)
Processor (configuration option)
RAM (configuration option)
Mass storage
Interfaces
Network
Power supply unit
General data
Degree of protection
Ambient temperature (operation)
Permissible humidity (operation)
Mounting type

Technical data
33.8 cm/13.3" TFT
1920 x 1080 Pixel(s) (Full HD)
LED
> 50000 h
projective-capacitive, ten-touch control
without operating system
Windows® 7 Ultimate (64-Bit)
Windows® 10 IoT Enterprise
Windows® Embedded Standard 7 (64-Bit)
Intel® Core™ i5 4300U 1.90 GHz
Intel® Celeron® 2980U 1.60 GHz
8 GB DDR3
4 GB DDR3 SODIMM
2.5" SSD, 120 GB (SATA)
2x USB 3.0
1x USB 3.0 inset
WLAN 802.11 a/g/n
Bluetooth 4.0 Class 1+2
1x Ethernet (10/100/1000 Mbps), RJ45
20 V/3.5 A external
IP65 (on the front), IP53 (on the back)
0°C ... 40°C
10% ... 85% (non-condensing)
Mobile application

Description
Tablet PC
- Configurable
Tablet PC , processor type: Intel® Core™ i5 4300U 1.90 GHz, RAM: 8 GB DDR3
- Windows® 7 Ultimate (64-bit)
Tablet PC , processor type: Intel® Celeron® 2980U 1.60 GHz, RAM: 4 GB DDR3 SODIMM
- Windows® 7 Ultimate (64-bit)
- Windows® Embedded 8.1 Industry Pro (64-bit)

Ordering data			
Type	Order No.	Pcs./Pkt.	
ITC 8113	2403738	1	
ITC 8113 PW7	2402961	1	
ITC 8113 SW7	2402957	1	
ITC 8113 SWES8	2402959	1	

Charging station , for simultaneous charging of two batteries
Battery , with charge level indicator
Power supply unit , for tablet PC, charging station and port replicator
Port replicator for tablet PC, can be rotated and tilted, with 1x Ethernet (10/100/1000 Mbps) RJ45 and 4 x USB 2.0
Handle
3-point strap for tablet PC
Transport case

Accessories			
ITC 8113 CHARGING STATION	2403081	1	
ITC 8113 RECHARGEABLE BATTERY	2403082	1	
ITC 8113 POWER SUPPLY	2403083	1	
ITC 8113 PORTREPLICATOR	2403313	1	
ITC 8113 HANDLE	2403314	1	
ITC 8113 CARRYING STRAP	2404751	1	
ITC 8113 TRANSPORT CASE	2404752	1	

Mobile panel

The HTP10 1000 mobile panel is equipped with ergonomic housing, a brilliant display, and integrated safety elements. With PC-level performance and Windows 10 IoT®, the mobile panel is the state-of-the-art solution for intuitive teach-in (starting and setting up the machine), startup, plus diagnostics and maintenance.

Your advantages:

- Ergonomic design
- Robust for harsh industrial environment
- Integrated safety functions
- Simple and intuitive operation
- Windows® 10 IoT Enterprise LTSB 2016 for the simple use of common visualization tools or C#, C++ for creating the application

Display data	
Display	25.7 cm / 10.1" TFT
Screen resolution	1280 x 800 Pixel(s) (WXGA)
Display lighting type	LED
Touch technology	analog resistive (polyester)
Computer data	
Operating system	Windows® 10 IoT Enterprise LTSB 2016 (64-bit), Multi-language
Processor	Intel® Atom™ E3815 1.46 GHz
RAM	4 GB DDR3
Mass storage	Flash SSD, 32 GB
Interfaces	1x USB 2.0
Slots	1x SD
Network	1 x Ethernet (10/100 Mbps), RJ45
Power supply unit	24 V DC ±20%
General data	
Degree of protection	IP65
Ambient temperature (operation)	0°C ... 45°C
Mounting type	none
Vibration (operation)	1g, Criterion 1, in accordance with IEC 60068-2-6
Shock	15g, 11 ms, in accordance with EN 61131-2

Ordering data		
Type	Order No.	Pcs./Pkt.
HTP10 1000	1047318	1

Accessories		
Ethernet connecting cable		
- Length: 5.0 m	1047320	1
- Length: 10.0 m	1047373	1
Connection box		
	1047323	1
Touch pens for tablet PC		
	1047361	1
Wall bracket		
	1047367	1



Industrial PC for mobile applications

Description		
Mobile panel		
Ethernet connecting cable		
- Length: 5.0 m		
- Length: 10.0 m		
Connection box		
Touch pens for tablet PC		
Wall bracket		

Web panels

The web panels for harsh environments with a powerful generation of processors and glass-film-glass touch technology offer performance and robustness for demanding applications. Operate and monitor your system in any environment, thanks to C1D2 certification for extreme operating conditions.

Web panels are inexpensive operator panels for basic operation and monitoring tasks.

Your advantages:

- Display can be read in direct sunlight
- Resistant to UV and IR radiation
- Extended temperature range
- Weatherproof, thanks to IP67 protection
- Resistant to environmental influences, such as salt spray, termites, and chemicals
- Can be operated when wearing work gloves



Rugged web panel

Display data	
Display	
Screen resolution	
Display lighting type	
Brightness	
Display backlight MTBF	
Color spectrum	
Touch technology	
Computer data	
Operating system	
Processor	
RAM	
Mass storage	
Interfaces	
Network	
Power supply unit	
Dimensions	
External dimensions (front plate)	W / H / D
Installation cutout	W / H / D
General data	
Degree of protection	
Ambient temperature (operation)	
Mounting type	
Vibration (operation)	
Shock	

Description
Web panel , extended temperature range
- Display: 14.5 cm (5.7"), 320 x 240 Pixel(s) (QVGA)
- Display: 17.8 cm (7"), 800 x 480 Pixel(s) (WVGA)

Mounting kit, including hardware for installation
- panel installation



Technical data		
WP 06T/WT		WP 07T/WT
14.5 cm/5.7" TFT active 320 x 240 Pixel(s) (QVGA)		17.8 cm/7" TFT 800 x 480 Pixel(s) (WVGA)
LED		
400 cd/m², typical (adjustable)		350 cd/m², typical (adjustable)
40000 h		
65536 colors		
Analog resistive (GFG), anti-reflective coating		
Windows® CE 5.0		
Arm9™, 184 MHz		
128 MB SDRAM		
Flash, 64 MB		
2x USB host 2.0		
1 x Ethernet (10/100 Mbps), RJ45		
24 V DC ±20%		
195 mm / 153 mm / 5 mm		234 mm / 173 mm / 5 mm
161 mm / 119 mm / 42 mm		200 mm / 140 mm / 42 mm
IP67 (front), IP20 (back)		
-20°C ... 70°C		
Front installation		
DIN EN 60068-2-6		
DIN EN 60068-2-27		
Ordering data		
Type	Order No.	Pcs./Pkt.
WP 06T/WT	2400163	1
WP 07T/WT	2400164	1
Accessories		
HMI SCB MOUNTING KIT 8	2701387	1

Touch panels

The touch panels for harsh environments with a powerful generation of processors and glass-film-glass touch technology offer performance and robustness for demanding applications. Operate and monitor your system in any environment, thanks to C1D2 certification for extreme operating conditions.

Your advantages:

- Display can be read in direct sunlight
- Resistant to UV and IR radiation
- Extended temperature range
- Weatherproof, thanks to IP67 or IP65 protection
- Resistant to environmental influences, such as salt spray, termites, and chemicals
- Can be operated when wearing work gloves

Display data
Display lighting type
Touch technology
Computer data
Operating system
Processor
RAM
Mass storage
Interfaces
Network
Power supply unit
General data
Degree of protection
Ambient temperature (operation)
Mounting type
Vibration (operation)
Shock

Description
Touch panel , extended temperature range, degree of protection: IP67
- Display: 10.92 cm (4.3"), 480 x 272 Pixel(s) (WQVGA)
- Display: 14.5 cm (5.7"), 640 x 480 Pixel(s) (VGA)
- Display: 17.8 cm (7"), 800 x 480 Pixel(s) (WVGA)
- Display: 30.7 cm (12.1"), 1280 x 800 Pixel(s) (WXGA)
- Display: 30.7 cm (12.1"), 800 x 600 Pixel(s) (SVGA)
- Display: 38.1 cm (15"), 1024 x 768 Pixel(s) (XGA)
Touch panel , extended temperature range, degree of protection: IP65
- Display: 14.5 cm (5.7"), 640 x 480 Pixel(s) (VGA)
- Display: 17.8 cm (7"), 800 x 480 Pixel(s) (WVGA)
- Display: 30.7 cm (12.1"), 1280 x 800 Pixel(s) (WXGA)
- Display: 30.7 cm (12.1"), 800 x 600 Pixel(s) (SVGA)
- Display: 38.1 cm (15"), 1024 x 768 Pixel(s) (XGA)

Mounting kit , including hardware for installation
- panel installation
- panel installation



Rugged touch panel



Technical data	
TP 3120W/WT	TP 3120W/WT-65
LED	
Analog resistive (GFG)	
Windows® Embedded Compact 7	
Arm® Cortex®-A8, 1000 MHz	
512 MB LPDDR SDRAM	
NAND-Flash, 1 GB	
2x USB 2.0	
1 x Ethernet (10/100 Mbps), RJ45	
24 V DC ±20%	
IP67 (front), IP20 (back)	IP65 (front), IP20 (back)
-20°C ... 70°C	
Bolt fixing	Front installation
1g, in accordance with EN 60068-2-6	
15g, in accordance with IEC 60068-2-27	

Ordering data			
Type	Order No.	Pcs./Pkt.	
TP 3043W/WT	2404286	1	
TP 3057V/WT	2403464	1	
TP 3070W/WT	2403465	1	
TP 3120W/WT	1029308	1	
TP 3121S/WT	2403466	1	
TP 3150S/WT	1029281	1	
TP 3057V/WT-65	1044278	1	
TP 3070W/WT-65	1044266	1	
TP 3120W/WT-65	1029352	1	
TP 3121S/WT-65	1029343	1	
TP 3150S/WT-65	1029309	1	

Accessories			
HMI SCB MOUNTING KIT 6	2701385	1	
HMI SCB MOUNTING KIT 8	2701387	1	

Rugged panel PC

With its high-end design and superior quality, the VMT 9000 series has been specifically developed for the target markets of logistics as well as agricultural and construction machinery. The terminals are characterized by their particularly compact and extremely robust design, ensuring that they will function reliably even in the harshest environments.

Your advantages:

- Display can be read in direct sunlight
- Can be operated when wearing work gloves
- Convenient operation via four freely assignable front buttons
- Screwless design for easy cleaning
- Weatherproof, thanks to IP66 protection



Configurable operator interface

Display data			
Display (configuration option)	26.4 cm / 10.4"-TFT 30.7 cm/12.1" TFT 38.1 cm/15" TFT		
Screen resolution	1024 x 768 Pixel(s) (XGA) 10.4"; 12.1"; 15" 1280 x 800 Pixel(s) (WXGA) 12.1"		
Display lighting type	LED		
Brightness (configuration option)	500 cd/qm (10.4") 600 cd/qm (12.1") 400 cd/qm (12.1" wide) 300 cd/qm (15")		
Display backlight MTBF	> 50000 h		
Color spectrum	16.2 million colors		
Touch technology (configuration option)	Projective-capacitive (PCAP) analog resistive (polyester)		
Computer data			
Operating system (configuration option)	without operating system Windows® 10 IoT Enterprise		
Processor	Intel® Atom™ x7-E3950 2.0 GHz		
RAM (configuration option)	4 GB LPDDR4 8 GB LPDDR4		
Mass storage (configuration option)	Flash eMMC, 64 GB (integrated) Flash eMMC, 64 GB + M.2 SSD, 128 GB		
Interfaces	1x COM (RS-232) 3x USB 3.0 1x USB 3.0 on the front with IP65 cover (can be deactivated via software)		
Optional interfaces (configuration option)	1x COM (RS-232) LTE/GPS module Wi-Fi 802.11a/b/g/n/ac + Bluetooth		
Network	2x Ethernet (10/100/1000 Mbps), RJ45		
Power supply unit	12 ... 48 V DC (9 ... 60 V DC IN)		
General data			
Degree of protection	IP66		
Ambient temperature (operation)	-30°C ... 60°C		
Mounting type	VESA MIS-D, 75 (integrated in back panel as a mounting option)		
Vibration (operation)	Class 5M3 in accordance with EN 60721-3-5		
Shock	Class 5M3 in accordance with EN 60721-3-5		
Ordering data			
Description	Type	Order No.	Pcs./Pkt.
Rugged panel PC, configurable	VMT 9000	1084510	1

Box PCs

The box PCs with IECEx and ATEX Zone 2/22 approvals have been specifically developed for use in potentially explosive areas. The devices for the Ex area are available in various performance classes.

Your advantages:

- High system availability, thanks to a fanless design which is suitable for industrial applications and the absence of moving parts
- Approvals for use in the Ex area of Zone 2/22 without additional measures
- Processor performance suited to the application: with the latest generation of powerful and energy-efficient Intel® Atom™, Celeron® or Core™ i processors
- Flexible configuration, thanks to a multitude of equipment versions

Notes:

You can find additional information about industrial PCs and the corresponding accessories in the product area of our website at phoenixcontact.net/products.



Configurable box PC



Technical data

Computer data	
Operating system (configuration option)	without operating system Windows® 7 Professional SP1 (64-Bit), German Windows® 7 Professional SP1 (64-bit), English Windows® 7 Ultimate SP1 (64 bit), Multi-language Windows® 7 Ultimate SP1 (32-bit), Multi-language Windows® 7 Professional SP1 (32-bit), English Windows® 7 Professional SP1 (32-bit), German Windows® Embedded Standard 7 SP1 (32-bit), Multi-language Windows® Embedded Standard 7 SP1 (64-bit), Multi-language Windows® 10 IoT Enterprise LTSC 2015 (32-bit), Multi-language Windows® 10 IoT Enterprise LTSC 2015 (64-bit), Multi-language
RAM (configuration option)	4 GB DDR3 SODIMM 8 GB DDR3 SODIMM 16 GB DDR3 SODIMM
Mass storage (configuration option)	without mass storage SSD (SLC), 4 GB SSD (SLC), 8 GB SSD (SLC), 16 GB SSD (SLC), 32 GB 2.5" HDD, 160 GB (SATA) 2.5" SSD, 240 GB 2.5" SSD, 480 GB
Interfaces	1x COM (RS-232/422/485) 2x USB 2.0 2x USB 3.0
Optional interfaces (configuration option)	without optional interface 2x COM (RS-232), 1x COM (RS-232/422/485)
Slots	PCI/PCIe optional
Monitor output	2x DisplayPort
Network	2x Ethernet (10/100/1000 Mbps), RJ45
Power supply unit	24 V DC ±20%
General data	
Degree of protection	IP30
Ambient temperature (operation)	-10°C ... 50°C (with SSD) 0°C ... 45°C (with HDD)
Permissible humidity (operation)	5% ... 95% (non-condensing)
Mounting type (configuration option)	Bookshelf mounting Wall mounting
Vibration (operation)	DIN EN 60068-2-6
Shock	15g, 11 ms in accordance with IEC 60068-2-27
EMC note	Class A product, see page 527

Ordering data

Description	Type	Order No.	Pcs./Pkt.
Industrial PC			
- with Intel® Atom™ E3845 technology	VL2 BPC 1000 EX	1054028	1
- with Intel® Celeron® N2930 technology	VL2 BPC 2000 EX	1054027	1
- with Intel® Core™ i3-4010U technology	VL2 BPC 3000 EX	1054025	1
- with Intel® Core™ i5-4300U technology	VL2 BPC 7000 EX	1054024	1
- with Intel® Core™ i7-6822EQ technology	VL2 BPC 9000 EX	1054023	1

Valueline panel PCs

The panel PCs with IECEx and ATEX Zone 2/22 approvals have been specifically developed for use in potentially explosive areas. The devices for the Ex area are available in various performance classes.

The robust panel PCs have widescreen displays with PCAP touch technology.

Your advantages:

- High system availability, thanks to a fanless design which is suitable for industrial applications and the absence of moving parts
- Approvals for use in the Ex area of Zone 2/22 without additional measures
- Processor performance suited to the application: with the latest generation of powerful and energy-efficient Intel® Atom™ processors
- Flexible configuration, thanks to a multitude of equipment versions
- Unchanged display dimensions enable easy integration into existing applications

Notes:

You can find additional information about industrial PCs and the corresponding accessories in the product area of our website at phoenixcontact.net/products.



**Configurable panel PC
with Intel® Atom™ E3845 technology**

Display data
Display lighting type
Color spectrum
Touch technology
Computer data
Operating system (configuration option)
Processor
RAM
Mass storage (configuration option)
Interfaces
Optional interfaces (configuration option)
Slots
Monitor output
Network
Power supply unit
General data
Degree of protection
Ambient temperature (operation)
Permissible humidity (operation)
Mounting type
Vibration (operation)
Shock

Technical data
LED
16.7 million colors
projective-capacitive, ten-touch control
without operating system
Windows® 7 Professional SP1 (64-Bit), German
Windows® 7 Professional SP1 (64-bit), English
Windows® 7 Ultimate SP1 (64 bit), Multi-language
Windows® 7 Ultimate SP1 (32-bit), Multi-language
Windows® 7 Professional SP1 (32-bit), English
Windows® 7 Professional SP1 (32-bit), German
Windows® Embedded Standard 7 SP1 (32-bit), Multi-language
Windows® Embedded Standard 7 SP1 (64-bit), Multi-language
Windows® 10 IoT Enterprise LTSB 2015 (32-bit), Multi-language
Windows® 10 IoT Enterprise LTSB 2015 (64-bit), Multi-language
Intel® Atom™ E3845 1.91 GHz
4 GB DDR3
SATA DOM SSD (SLC), 8 GB
SATA DOM SSD (SLC), 16 GB
SATA DOM SSD (SLC), 32 GB
SATA DOM SSD (MLC), 64 GB
1x COM (RS-232/422/485)
2x USB 2.0
1x USB 3.0
without optional interface
1x COM (RS-232), 1x COM (RS-485), 2x CAN
1x COM (RS-232), 1x COM (RS-485)
1x SD
1x DisplayPort
2x Ethernet (10/100/1000 Mbps), RJ45
24 V DC ±20%
IP66 (front), IP30 (back)
0°C ... 45°C (with HDD)
0°C ... 50°C (with SSD)
20% ... 85% (non-condensing)
Front installation
1g with SSD, 0.5g with HDD, in accordance with EN 60068-2-6
DIN EN 60068-2-27

Description
Industrial panel PC (PPC) with projected capacitive touch screen, configurable
- Display: 17.8 cm (7"), 800 x 480 Pixel(s) (WVGA)
- Display: 22.9 cm (9"), 800 x 480 Pixel(s) (WVGA)
- Display: 30.7 cm (12.1"), 1280 x 800 Pixel(s) (WXGA)

Ordering data		
Type	Order No.	Pcs./Pkt.
VL2 PPC7 1000 EX	1054096	1
VL2 PPC9 1000 EX	1054095	1
VL2 PPC12 1000 EX	1054094	1

Valueline panel PCs

The panel PCs with IECEx and ATEX Zone 2/22 approvals have been specifically developed for use in potentially explosive areas. The devices for the Ex area are available in various performance classes.

The robust panel PCs have widescreen displays with PCAP touch technology.

Your advantages:

- High system availability, thanks to a fanless design which is suitable for industrial applications and the absence of moving parts
- Approvals for use in the Ex area of Zone 2/22 without additional measures
- Processor performance suited to the application: with the latest generation of powerful and energy-efficient Intel® Atom™, Celeron® or Core™ i processors
- Flexible configuration, thanks to a multitude of equipment versions
- Can be extended via PCI/PCIe slot
- Unchanged display dimensions enable easy integration into existing applications

Notes:

You can find additional information about industrial PCs and the corresponding accessories in the product area of our website at phoenixcontact.net/products.



Configurable panel PC



Display data
Display (configuration option)
Screen resolution
Display lighting type
Brightness
Display backlight MTBF
Color spectrum
Touch technology
Computer data
Operating system (configuration option)
RAM (configuration option)
Mass storage (configuration option)
Interfaces
Optional interfaces (configuration option)
Slots
Monitor output
Network
Power supply unit
General data
Degree of protection
Ambient temperature (operation)
Permissible humidity (operation)
Mounting type
Vibration (operation)
Shock
EMC note

Technical data

39.6 cm/15.6" TFT
47.0 cm / 18.5" TFT
54.6 cm/21.5" TFT
1366 x 768 Pixel(s) (WXGA) 15.6" TFT; 18.5" TFT
1920 x 1080 Pixel(s) (Full HD)
LED
300 cd/m², typical (adjustable)
> 50000 h (dependent on configuration)
16.7 million colors
projective-capacitive, ten-touch control
without operating system
Windows® 7 Professional SP1 (64-Bit), German
Windows® 7 Professional SP1 (64-bit), English
Windows® 7 Ultimate SP1 (64 bit), Multi-language
Windows® 7 Ultimate SP1 (32-bit), Multi-language
Windows® 7 Professional SP1 (32-bit), English
Windows® 7 Professional SP1 (32-bit), German
Windows® Embedded Standard 7 SP1 (32-bit), Multi-language
Windows® Embedded Standard 7 SP1 (64-bit), Multi-language
Windows® 10 IoT Enterprise LTSC 2015 (32-bit), Multi-language
Windows® 10 IoT Enterprise LTSC 2015 (64-bit), Multi-language
4 GB DDR3 SODIMM
8 GB DDR3 SODIMM
16 GB DDR3 SODIMM
without mass storage
SSD (SLC), 4 GB
SSD (SLC), 8 GB
SSD (SLC), 16 GB
SSD (SLC), 32 GB
2.5" HDD, 160 GB (SATA)
2.5" SSD, 150 GB
2.5" SSD, 240 GB
2.5" SSD, 480 GB
1x COM (RS-232/422/485)
2x USB 2.0
2x USB 3.0
without optional interface
2x COM (RS-232), 1x COM (RS-232/422/485)
PCI/PCIe optional
2x DisplayPort
2x Ethernet (10/100/1000 Mbps), RJ45
24 V DC ±20%
IP66 (front), IP30 (back)
0°C ... 45°C (with HDD)
-10°C ... 50°C (with SSD)
5% ... 95% (non-condensing)
Front installation
1g with SSD, 0.5g with HDD, in accordance with EN 60068-2-6
DIN EN 60068-2-27
Class A product, see page 527

Ordering data

Description	Type	Order No.	Pcs./Pkt.
Industrial panel PC (PPC) with projected capacitive touch screen (ten-point touch). Configurable options for display size, screen resolution, and mass storage.			
- with Intel® Atom™ E3845 technology	VL2 PPC 1000 EX	1050366	1
- with Intel® Celeron® N2930 technology	VL2 PPC 2000 EX	1050367	1
- with Intel® Core™ i3-4010U technology	VL2 PPC 3000 EX	1050368	1
- with Intel® Core™ i5-4300U technology	VL2 PPC 7000 EX	1050365	1
- with Intel® Core™ i7-6822EQ technology	VL2 PPC 9000 EX	1050364	1

Touch panels

The powerful HMIs in the TPM 3000 series are designed for demanding use on ships. New display sizes, various configuration options, and a wide range of functions ensure user-friendly and reliable operation, monitoring, and alarms when seafaring.

Features:

- Light-absorbing front plates
- Dimmable backlight
- Certifications in accordance with ABS, BV, DNV-GL, LR, RINA
- Certified compass safe distance in accordance with DIN EN 60945
- Acoustic warning from integrated horn
- All common communication standards supported
- Floating output
- 4:3 or 16:9 display format
- Versions with black front incl. dimming buttons and horn or with silver front and no buttons



Configurable maritime touch panel



Display data
Display lighting type
Touch technology
Computer data
Operating system
Processor
RAM
Mass storage
Interfaces
Optional interfaces (configuration option)

User software (configuration option)

Network
Power supply unit

General data
Front panel (configuration option)

Degree of protection
Ambient temperature (operation)

Mounting type
Vibration (operation)
Shock
EMC note

Technical data

LED
analog resistive (polyester)

Windows® Embedded Compact 7
Arm® Cortex®-A8, 1000 MHz
512 MB LPDDR RAM
NAND-Flash, 1 GB
2x USB host 2.0
without optional interface
1 x COM (RS-232), 1 x COM (RS-422; 4-wire, full duplex)
1 x COM (RS-232), 1 x COM (RS-422; 4-wire, full duplex), 2 x CAN
2x CAN

Visu+
MicroBrowser
1 x Ethernet (10/100 Mbps), RJ45
24 V DC ±20%

Aluminum (black anodized) with dimming buttons and horn
Aluminum (naturally anodized) without dimming buttons and horn

IP65 (front), IP20 (back)
-20°C ... 60°C (front aluminum, black anodized)

Front installation
1g, in accordance with EN 60068-2-6
15g, in accordance with IEC 60068-2-27
Class A product, see page 527

Ordering data

Type	Order No.	Pcs./Pkt.
TPM 3043	2404516	1
TPM 3057	2404517	1
TPM 3070	2404518	1
TPM 3090	2404519	1
TPM 3105	2404520	1
TPM 3121	2404521	1
TPM 3120	2404522	1
TPM 3150	2404524	1
TPM 3154	2404525	1

Accessories

TOUCH PEN	2701379	1
USB FLASH DRIVE	2402809	1
HMI BATTERY	2701383	1
HMI SCB MOUNTING KIT 6	2701385	1
7" DISPLAY PROTECTIVE FOIL	2701374	1

Description
Touch panel with graphics-capable display, for maritime applications
- Display: 10.92 cm (4.3"), 480 x 272 Pixel(s) (WQVGA)
- Display: 14.5 cm (5.7"), 640 x 480 Pixel(s) (VGA)
- Display: 17.8 cm (7"), 800 x 480 Pixel(s) (WVGA)
- Display: 22.9 cm (9"), 800 x 480 Pixel(s) (WVGA)
- Display: 26.4 cm (10.4"), 800 x 600 Pixel(s) (SVGA)
- Display: 30.7 cm (12.1"), 800 x 600 Pixel(s) (SVGA)
- Display: 30.7 cm (12.1"), 1280 x 800 Pixel(s) (WXGA)
- Display: 38.1 cm (15"), 1024 x 768 Pixel(s) (XGA)
- Display: 39.05 cm (15.4"), 1280 x 800 Pixel(s) (WXGA)

Stylus for touch screens

USB memory stick, memory capacity 8 GB

CMOS battery

Mounting kit, including hardware for installation

- panel installation

Protective foil for touch screen