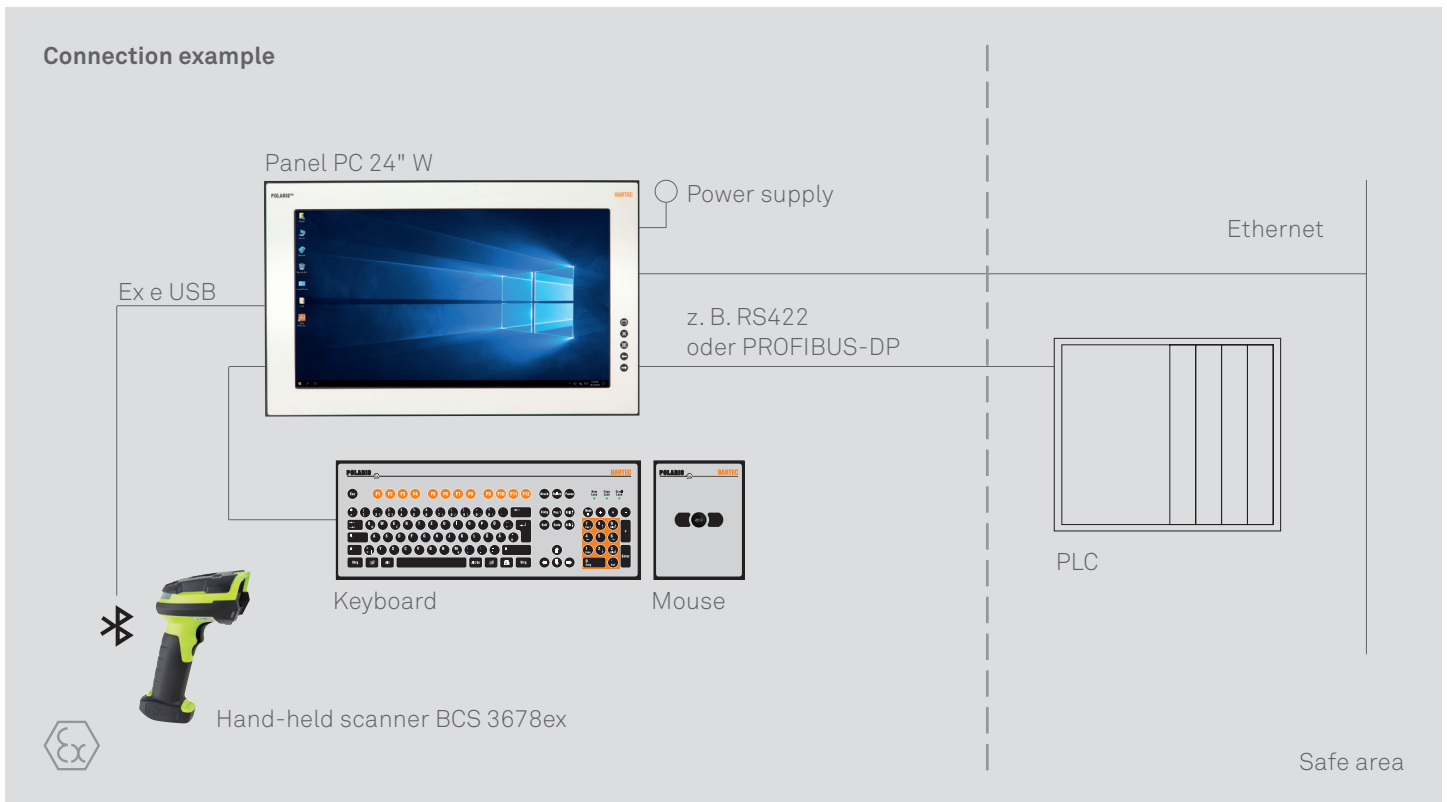


# Polaris Professional

for Zone 1 and 21



The POLARIS Professional series is the modern safe HMI series for the Zone 1 hazardous area. The Ethernet interface can be used to connect individual computers or network devices, e. g. a printer, to an existing local network (LAN) (WLAN is also a possible option) or local networks can be set up completely wirelessly. This facilitates a high-performance visualisation and operation of the processes directly on site.

The state-of-the-art display technology guarantees an optimum contrast, even with large viewing angle. The Front-panel fitting assures easy installation. On request, the devices are also available as ready-made system solutions in Stainless-steel enclosure for wall or floor mounting. An intrinsically safe USB interface is available for a USB Ex i memory stick. Intrinsically safe input devices can also be connected. The optional (intrinsically safe) touchscreen offers the optimum in operating comfort. Windows 7® Ultimate or Windows 10® IoT can be used as an operating system. The Panel PCs therefore support the installation of numerous software packages, such as customer-specific software or other commercially available standard visualisation software.

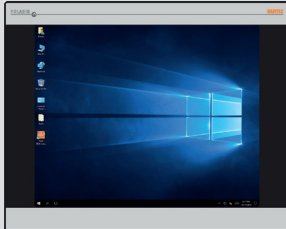
- Touchscreen
- Intel® Atom™ E3845, 4 x 1.91 GHz
- SSD with Power Protected
- Direct coupling in the Ex-area
- Windows® 10 IoT LTSB
- Windows 10 IoT LTSC



POLARIS Professional 15"



POLARIS Professional 15" Sunlight



POLARIS Professional 19.1"



POLARIS Professional 12.1" W



POLARIS Professional 17.3" W



POLARIS Professional 24" W

### Explosion protection

Marking ATEX Zone 1 and 21	Ex II 2G Ex db eb q [ib] IIC T4 Gb Ex II 2D Ex tb IIIC T120 °C Db
Certification	IBExU 05 ATEX 1117 X
Marking IECEx	Ex db eb q [ib] IIC T4 Gb Ex tb IIIC T120 °C Db
Certification	IECEx IBE 11.0007 X

The marking is variable and depends on type and components used.  
Other approvals and certificates, see [bartec.com](http://bartec.com) [bartec.com](http://bartec.com)

### Technical data

Construction	Stainless steel enclosure
Protection class	IP 65 (front) IP 54 (back)
Interfaces	1 x Ex e Ethernet 100/10BaseT (optional LWL) 1 x Ex e USB 1 x Ex e RS422 1 x Ex i USB for Ex i-Memory-Stick 2 x Ex i PS/2 for intrinsically safe mouse and keyboard
Optional accessories	Hand-held scanner on request
Power supply	DC 24 V ± 10 % AC 90 to 253 V, 50 to 60 Hz
Input voltage range	DC 24 V ± 10 % AC 90 V or 253 V (12.1"W only in DC-Version)
Max. power consumption	$P_{max.} < 100$ W depending on the variant
Admissible ambient temperatures	Storage -20 °C to +50 °C Operation 0 °C to +50 °C System solution with heating on request. for 15" Sunlight Storage -20 °C to +60 °C Operation -20 °C to +60 °C System solution with heating on request.
Relative air humidity	5 to 95 % non-condensing
Vibration	0,7 g/1 mm; 5 Hz to 500 Hz pulse in all 3 axes
Shock	15 g/11 ms pulse in all 3 axes
Material	Front: polyester foil on anodised aluminium plate (conditionally UV-resistant) Back: bichromated sheet steel

## Variants

POLARIS Professional	Professional 15"	Professional 15" Sunlight	Professional 19.1"	Professional 12.1" W	Professional 17.3" W	Professional 24" W
<b>Display</b>						
Graphics-capable TFT colour display	15"	15"	19.1"	12.1" W	17,3" W	24" W
Colours	16,7 million	16,7 million	16,7 million	262.144	16,7 million	16,7 million
Resolution	XGA 1024 x 768	XGA 1024 x 768	SXGA 1280 x 1024	WXGA 1280 x 800	Full HD 1920 x 1080	Full HD 1920 x 1080
Brightness	350 cd/m <sup>2</sup>	1000 cd/m <sup>2</sup>	300 cd/m <sup>2</sup>	400 cd/m <sup>2</sup>	400 cd/m <sup>2</sup>	300 cd/m <sup>2</sup>
Visible area approx	304 x 228 mm	304 x 228 mm	380 x 305 mm	264 x 166 mm	382 x 215 mm	531 x 299 mm
Contrast	700:1	700:1	1300:1	1200:1	600:1	3000:1
Antireflection-coated glass pane	yes	yes	yes	yes	yes	yes
Touchscreen (resistive)	yes	yes	optional	yes	yes	optional
Backlighting	LED technology	LED technology	LED technology	LED technology	LED technology	LED technology
Service life approx. (at +25 °C)	50.000 hours	50.000 hours	50.000 hours	50.000 hours	50.000 hours	50.000 hours
<b>Dimensions</b>						
Dimensions (W x H x D in mm)	411 x 332 x approx. 135 mm	411 x 332 x approx. 135 mm	498 x 400 x approx. 135 mm	400 x 246 x approx. 130 mm	503 x 314 x approx. 135 mm	644 x 406 x approx. 135 mm
Wall cut-out (in mm)	394,5 x 315,5 + 0,5	394,5 x 315,5 + 0,5	484 x 386,5 + 0,5	386 x 226 + 0,5	489 x 301 + 0,5	630 x 392 + 0,5
Weight	approx. 23 kg	approx. 23 kg	approx. 33 kg	approx. 14 kg	approx. 33 kg	approx. 40 kg

## Order details

1	7	-	7	1	V	1	*	*	*	*	/	*	0	0	0	/	*	*	0	0	
							<b>A</b>	<b>A</b>	<b>B</b>	<b>B</b>	<b>C</b>						<b>D</b>	<b>E</b>			
<b>AA</b>	<b>Designation</b>										<b>C</b>	<b>Operating system</b>									
	60 – Professional 15" with Touchscreen											S – Windows 7® Ultimate (32 Bit)									
	62 – Professional 15" Sunlight with Touchscreen											K – Windows 10 lot Enterprise 2016 LTSC (32 Bit)									
	50 – Professional 19.1" without Touchscreen											L – Windows 10 lot Enterprise 2016 LTSC (64 Bit)									
	70 – Professional 19.1" with Touchscreen											M – Windows 10 lot Enterprise 2021 LTSC (64 Bit)									
	F0 – Professional 17.3" W with Touchscreen																				
	C0 – Professional 24" W without Touchscreen										<b>D</b>	<b>Input voltage</b>									
	D0 – Professional 24" W with Touchscreen											0 – AC 90 bis 253 V									
												2 – DC 24 V									
<b>BB</b>	<b>Interfaces</b>										<b>E</b>	<b>Harddrive</b>									
	76 – USB Ex e/RS422											2 – 128 GB SSD									
	XX – Further Interfaces combinations on request											5 – 128 GB SSD Power Protected									

Please insert code number. Subject to technical changes.  
Accessories with order details can be found on the accessory pages.

## Order number

Professional 12,1" W with Touchscreen

1	7	-	7	1	V	1	-	B	4	3	7	/	*	0	0	0	/	0	*	0	0				
													<b>C</b>									<b>E</b>			