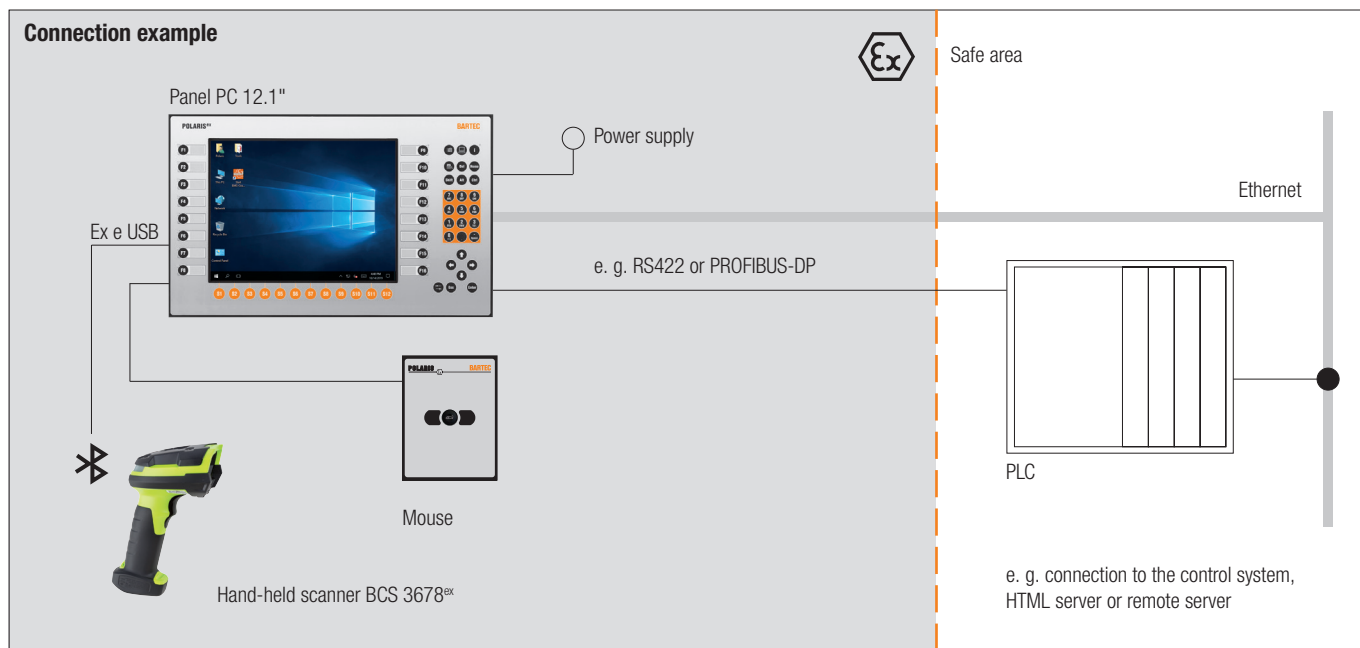High-resolution displays with LED technology and touch screen for intuitive and convenient operation are now available in the standard version. State-of-the-art LED display technology ensures the optimum contrast even with a large viewing angle. The panel PC has been equipped as standard with the Intel® Atom™ SoC E3845, 1.91 GHz. Windows 7® Ultimate or Windows 10® IoT can be used as an operating system. Thanks to the integrated keyboard customisation for Windows®, Siemens WinCC flexible®, RS View® or BMS-Graf-pro, the POLARIS Touch panels can be used for all visualisation tasks. They can be connected to the control or the process control system through Ethernet, PROFIBUS-DP or various serial COM interfaces. Of course, here too the user can work with the latest BMS-Graf-Pro Version 7, allowing for example the transfer of projects through Ethernet, the use of graphics lists and the integrated user administration. Wired electrical connections are facilitated by integrated terminal compartments. The front-panel fitting design ensures easy installation. On request, the devices are also available as ready-made system solutions in Stainless-steel enclosure for wall or floor mounting. They also feature an intrinsically safe USB interface for a USB Ex i flash drive. Intrinsically safe input devices can also be connected.

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
Other approvals and certificates, see www.bartec.de	
Ambient temperature	-20 °C to +60 °C
Variant for Zone 2	www.bartec.de

Technical data

Construction	Front-panel fitting
Protection class	IP 65 (front) IP 54 (back)
Display	12.1" TFT graphic display 16.7 million colors Resolution XGA 1024 x 768 pixels Brightness 500 cd/m² Visible surface approx. 246 x 184 mm Contrast 700:1 Touchscreen (resistive)
Backlighting	LED technology Service life approx. 50,000 hours (at +25 °C)
Computer capacity	Processor: Intel® Atom™ E3845, 4 x 1.91 GHz 4 or 8 GB RAM 100 GB HD or 128 GB SSD (MLC)
Operating system	Windows 7® Ultimate or Windows® 10 IoT LTSB
Keyboard (short-stroke keys)	Alphanumeric key block 4 cursor keys 12 special keys 16 function keys able to be labelled with LEDs
Interfaces (basic version)	1 x Ex e Ethernet 100/10BaseT 1 x Ex e USB 1 x Ex e RS422 1 x Ex i USB for Ex i memory stick 1 x Ex i PS/2 for intrinsically safe mouse
Optional accessories	Hand-held scanner on request
Dimensions (W x H x D)	440 mm x 275 mm x approx. 130 mm
Wall cut-out	425 mm x 255 mm + 0.5 mm
Gewicht	approx. 18 kg
Power supply	DC 24 V ± 10 %
Max. power consumption	$P_{max.} < 35$ W
Permissible ambient temperatures	Storage -20 °C to +50 °C Operation 0 °C to +50 °C Variant Operation -20 °C to +50 °C on request (without external heating)
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

Connection example

Panel PC 12.1"

Power supply

Ex e USB

e. g. RS422 or PROFIBUS-DP

Mouse

Hand-held scanner BCS 3678ex

Safe area

Ethernet

PLC

e. g. connection to the control system, HTML server or remote server

1

Ordering information

Description	Interfaces	Code no.	Operating system	Code no.	Computer capacity	Code no.
POLARIS Panel PC 12.1"	USB Ex e/RS422 (recommended version)	37	Windows 7 Ultimate 32bit incl. Recovery (at 4 GB RAM)	S	100 GB HD	0
	Further Interface combinations on request	XX	Windows 10 IOT LTSB 32bit (4 GB RAM) incl. Recovery and Runtime BMS Graf	K	128 GB SSD	2
			Windows 10 IOT LTSB 64bit incl. Recovery (at 8 GB RAM)	L	128 GB SSD Power Protected	5

Complete order no. 17-71V1-80 ☐☐ **/** ☐ **0000** ☐ **00**

Please insert correct code. Technical data subject to change without notice.
You will find the accessoires with order details on the accessories pages.