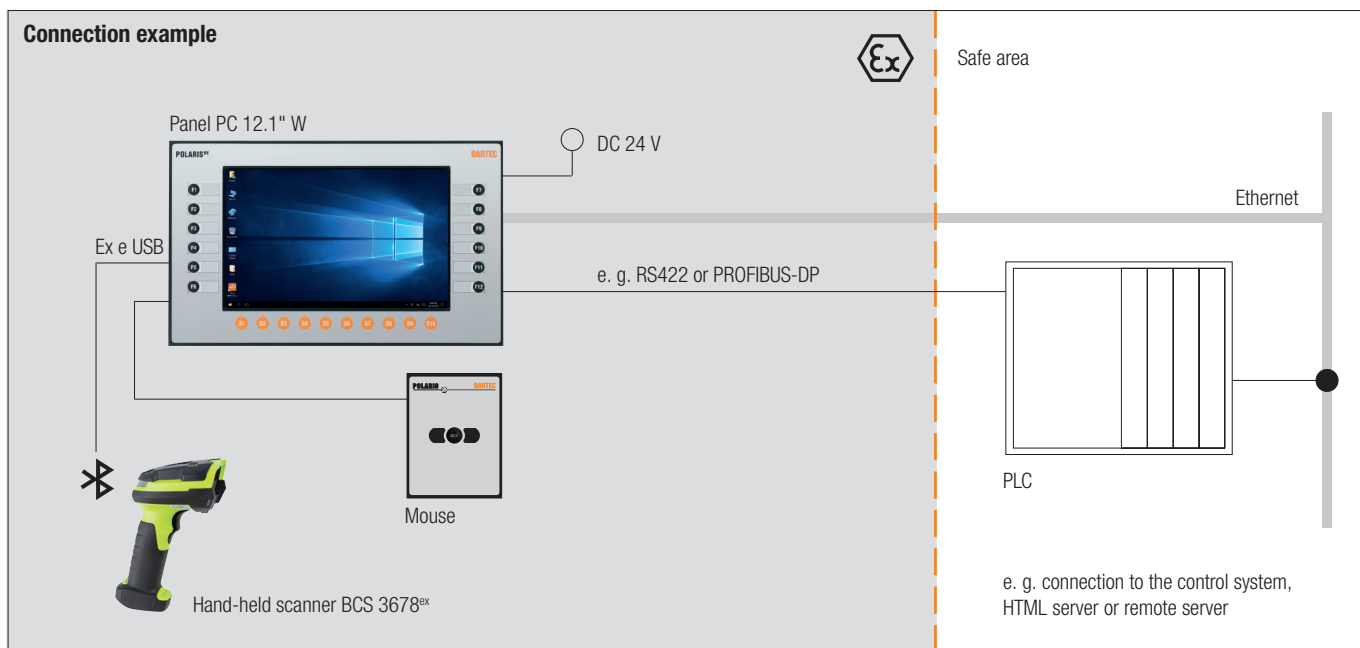The POLARIS Panel PC 12.1" W is an innovative new development of the POLARIS PROFESSIONAL series. The high-resolution display with LED back-lighting and touchscreen allow intuitive and comfortable operation. Even with wide viewing angles or when lighting is poor, the state-of-the-art LED display technology assures the optimum in contrast. 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 | |
| Variant for Zone 2 | www.bartec.de |

### Technical data

| | |
|---|---|
| Construction | Front-panel fitting |
| Protection class | IP 65 (front) / IP 54 (back) |
| Display | 12.1" W graphics-capable TFT colour display / 16.7 million colors / WXGA resolution, 1280 x 800 pixels / Brightness 400 cd/m² / Visible surface approx. 264 x 166 mm / Contrast 1000:1 / 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 |
| Front panel | 10 special keys and 12 inscribable function keys with LEDs / Optional variant: Without front-panel keys |
| 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 (B x H x T) | 400 mm x 246 mm x approx. 130 mm |
| Wall cut-out | 386 mm x 226 mm + 0.5 mm |
| Weight | approx. 14 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" W

DC 24 V

Ethernet

Ex e USB

e. g. RS422 or PROFIBUS-DP

Mouse

PLC

Hand-held scanner BCS 3678ᵉˣ

Safe area

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

1

## Ordering information

| Description | Code no. | Interfaces | Code no. | Operating system | Code no. | Computer capacity | Code no. |
|---|---|---|---|---|---|---|---|
| Panel PC 12.1" W with front-panel keys | 0 | USB Ex e/RS422 (recommended version) | 37 | Windows 7 Ultimate 32bit incl. Recovery (at 4 GB RAM) | S | 100 GB HD | 0 |
| | | | | Windows 10 IOT LTSB 32bit (4 GB RAM) incl. Recovery and Runtime BMS Graf | K | 128 GB SSD | 2 |
| Panel PC 12.1" W without front-panel keys | 4 | Further Interface combinations on request | XX | Windows 10 IOT LTSB 64bit incl. Recovery (at 8 GB RAM) | L | 128 GB SSD Power Protected | 5 |

**Complete order no. 17-71V1-B ☐☐☐ / ☐ 0000 ☐ 00**
Please insert correct code. Technical data subject to change without notice.
You will find the accessories with order details on the accessories pages.