



Features

- Open operating system
- Slim and modern industrial design
- Clean-room-compliant version (gap-free)
- Optimized connection technology
- Sunlight readable display
- Low-reflective (the capacitive design)
- Optionally available as a resistive touch display

The POLARIS SMART HMI 7" W is an innovative further development of the POLARIS series. The high-resolution display with LED backlighting and touchscreen allows intuitive and comfortable operation. It is optionally available in a capacitive or in a resistive version. The state-of-the-art LED display technology offers optimum contrast even with large viewing angles or in poor lighting conditions. As standard, the Panel PC is equipped with a third-generation processor, the Intel® Atom™ with 2 x 1.46 GHz. The open Windows operating system makes the device series unique on the market. It is also possible to work with the BMS-Graf-Pro. Connection to the control or to the process control system is facilitated by Ethernet. The front-panel insertion allows easy installation. On request, the devices are also available as ready-made system solutions in stainless-steel enclosures for wall or floor mounting. The intrinsically safe USB interfaces are accessible on the back. Intrinsically safe input devices are connected also.

Explosion protection

Marking ATEX Ⓔ II 2G Ex eb q [ib] IIC T4 Gb
Zone 1 and 21 Ⓔ II 2D Ex tb IIIC T120 °C Db

Certification IBE XU 05 ATEX 1117 X

Marking IECEx Ex db eb q [ib] IIC T4 Gb
Ex tb IIIC T120 °C Db

Certification IECEx IBE 11.0007X

Other approvals and certificates, see www.bartec.de

Technical data

Construction	Front-panel fitting
Protection class	front/rear: IP 65 acc. to EN/IEC 60529 front: IP 6X acc. to EN/IEC 60079-0 rear: IP 54 acc. to EN/IEC 60079-0
Display	7" W TFT colour display 262,144 colours WVGA resolution, 800 x 480 pixels brightness 500 cd/m ² visible surface approx. 152 mm x 91 mm contrast 600:1 sunlight readable display
Background lighting	LED technology service life approx. 50,000 hours (at +25 °C)
Touch	capacitive, low-reflection due to optical bonding resistive touch display (membrane touch) on request
Processor	CPU Intel® Atom™ (E 3826) Dual Core with 2 x 1.46 GHz RAM: 2 GB (optional: 4 GB) 4 GB internal Flash Drive hard-drive SSD with 128 GB (MLC)
Operating system	Windows® 10 IoT or Windows 7® Ultimate or Windows 7® Embedded
Interfaces	2 x Ex i USB 2.0 2 x Ex e USB 2.0 1 x Ethernet 100 BaseT
Dimensions (W x H x D)	240 mm x 170 mm x 80 mm
Wall cut-out	226 mm x 153 mm
Mounting position	any
Weight	approx. 4.8 kg
Power supply	DC 24 V (DC 20 to 30 V)
Supply	External supply: DC 24 V/2 A Standard operation without USB: approx. 450 mA Power dissipation P _{max.} (with USB) < 25 W P _{max.} (without USB) < 20 W Standard operation without USB: approx. 12.5 W
Permissible ambient temperature	Operation 0 °C to +50 °C Storage -20 °C to +60 °C
Temperature range	extended -20 °C to +60 °C
Relative air humidity	5 % bis 95 %, non-condensing
Material	Front resistive: polyester foil on anodised aluminium plate (conditionally UV-resistant) front capacitive: hardened glass front on anodised aluminium plate back: stainless steel