

# POLARIS SMART HMI 12,1" W

## Datasheet



The Smart HMI 12,1" W is in-tended for use as an independently protected device in atmospheres under risk of explosion (Zone 1 and Zone 21), and extends the tried and tested POLARIS Smart HMI series. Based on a Windows Operating System for external visualisation software.

Applications can also be used in Zone 1 & Zone 21 without additional effort, through a customary display resolution of 1,280 x 800 pixels. The PC panel is fitted as standard with an Ethernet interface and various USB interfaces. Plant and equipment can also be extended later, with further interfaces and functions via extension modules and smart devices.

- capacitive touch display
- low reflection due to "optical bonding"
- display resolution of 1280 x 800 pixels
- Windows Operating System for external visualisation software
- front panel mounting for easy installation and integration

## Explosion protection

Marking ATEX Zone 1 and 21	II 2G Ex eb q [ib] IIC T4 Gb 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 11.0007X

Other approvals and certificates, see [bartec.com](http://bartec.com)

## Technical data

Construction	Front-panel fitting
Protection class	front/rear: IP 65 acc. to EN/IEC 60529 front: IP 65 acc. to EN/IEC 60079-0 rear: IP 65 acc. to EN/IEC 60079-0
Display	12,1" W TFT colour display 16,7 million colours WXGA resolution, 1280 x 800 pixels brightness 600 cd/m <sup>2</sup> visible surface approx. 264 x 166 mm contrast 1000:1
Touchscreen	capacitive, low reflection due to bonding
Background lighting	LED technology service life approx. 50,000 hours (at +25 °C)
Processor	CPU Intel® Atom Quad Core with 4 x 1.60 GHz (Burst 2.0 GHz), 8 GB RAM, 32 GB internal Flash Drive Alternative: Quad Core with 4 x 1.9 GHz, 16 GB RAM 64 GB internal Flash Drive Hard-drive SSD with 240 GB (MLC) Power protected
Operating system	Windows® 10 IoT 64 bit (Enterprise 2021 LTSC) inclusive Recovery
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)	407mm x 271mm x 110mm
Wall cut-out	386 mm x 251 mm
Mounting position	see operating instructions
Mounting position up to 60°C	see operating instructions
Weight	approx. 12,5 kg
Power supply	DC 24 V (DC 20 to 30 V)
Supply	External supply: DC 24 V/2 A Standard operation without USB: approx. 1050 mA Power dissipation P <sub>max.</sub> (with USB) < 35 W P <sub>max.</sub> (without USB) < 30 W standard operation without USB: approx. 25 W
Permissible ambient temperature	Operation: -20°C to +60°C Storage: -20°C to +60°C
Material	Front resistive: tempered glass front on anodized aluminum plate back: stainless steel

## Ordering information

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											A	B	C			

A	<b>Version</b> 3 – Intel® Atom Quad Core 8 GByte RAM, 32 GByte MMC Flash 4 – Intel® Atom Quad Core 16 GByte RAM, 64 GByte MMC Flash
B	<b>Hard disk</b> 5 – M.2 SATA SSD Power protected (actual 240 GByte)
C	<b>Operating system</b> 5 – Windows® 10 IoT LTSC 64 bit inkl. Recovery

Complete order number. Please insert correct code.

## Connection example

POLARIS SMART HMI 12,1" W



DC 24 V

Ethernet



Control unit

e.g. connection  
to control system

Safe area

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