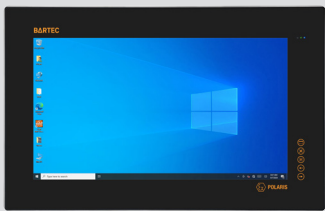**BARTEC**

POLARIS Smart HMI zone 2
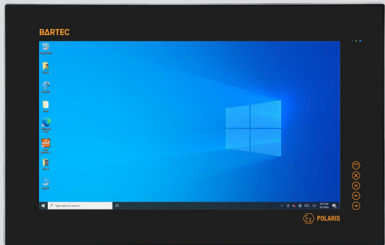
Panel PC's / Thin Clients for zone 2 and 22

The POLARIS Smart HMIs are an innovative, explosion-proof panel PC series. The devices are equipped with an Intel® processor N 97 or Intel® Core™ i5-1135G7 as standard. Windows 10 LTSC is used as the operating system. As a Thin Client solution, the BARTEC Zero Client Shell or PXE boot is available.

The POLARIS Smart HMI's 17", 21.5", and 24" are available with a standard resolution of 1920 x 1080 pixels in 16:9 format and are designed for use in Zones 2 and 22. The devices come equipped with a multitouch display as standard, which uses optical bonding to ensure optimal contrast even in poor lighting conditions. Features include two Ethernet interface as well as various USB ports that can be used to connect different operating accessories such as keyboard, trackball and more.
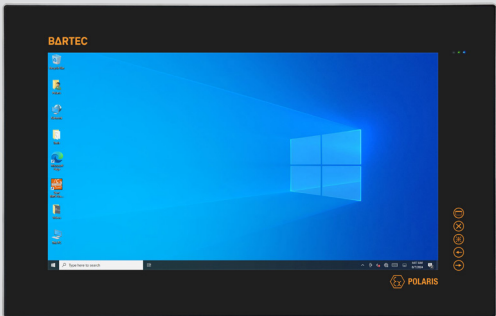
– TPM 2.0 security standard, Windows 11 compliant
– Capacitive touch display
– Low reflection due to „optical bonding"
– Display resolution of 1920 x 1080 pixels
– Windows Operating System for external visualisation software
– Front panel mounting for easy installation and integration

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POLARIS Smart HMI 17"

POLARIS Smart HMI 21.5"

POLARIS Smart HMI 24"

Explosion protection

Marking ATEX Zone 2 and 22	⟨Ex⟩ II 3G Ex ec ic [ic IIC Gc] IIC T4 Gc ⟨Ex⟩ II 3D Ex ec tc [ic IIC Gc] IIIC T120 °C Dc
Certification	Manufacturer's declaration

The marking is variable and depends on type and components used. Other approvals and certificates see **bartec.com**

Technical data

Construction	Front-panel fitting
Material	Front capacitive: tempered glass front on anodized aluminum plate back: stainless steel
Protection class	front / rear: ≥ IP64
Relative air humidity	5 to 95 % non-condensing

Electronic Unit

Processor	CPU Intel® N97, Quad Core with 4 x 3,6 GHz, up to 16 GB RAM alternative: Intel® Core™ i5-1135G7 Quad-core with 4 x 4.2 GHz up to 64 GB RAM
Hard-drive	SSD up to 1TB
Operating system	Windows®
Interfaces	Base version : 2 x Ethernet 2.5 Gigabit (internal RJ45) 2 x USB 3.2 Gen 1 (intern plug Type A) 2 x USB Exi Terminal (Keyboard & Mouse) 1 x USB Exi Type A (Data stick extern) Optional: Serial Interface RS232/422/485

Optional accessories

Smart Device	Smart Device Bluetooth
Smart Device	Smart Device WLAN
Barcode	Bluetooth or Cable Hand-held scanner
Keyboard	POLARIS Keyboard
Mouse	POLARIS Trackball

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Variants

POLARIS Smart HMI	17" W	21.5" W	24" W
TFT colour display	17.3" Wide	21.5" Wide	24.0" Wide
Colours	16.7M (3 x 8 Bit)	16.7M (3 x 8 Bit)	16.7M (3 x 8 Bit)
Resolution	HD (1920x1080)	HD (1920x1080)	HD (1920x1080)
Visible area approx.	381.9 x 214.8 mm	476.6 x 268.1 mm	531.4 x 289.9 mm
Brightness	400 cd/m²	1000 cd/m²	300 cd/m²
Contrast	600:1	5000:1	5000:1
Touch	Capacitive	Capacitive	Capacitive
Optical Bonding	Yes	Yes	Yes
Backlighting	LED technology	LED technology	LED technology
Service life approx. (at +25 °C)	50.000 hours	50.000 hours	50.000 hours
Dimensions (W x H x D in mm)	540 x 351 x 110 mm	632 x 401 x 110 mm	681 x 443 x 110 mm
Wall cut-out (in mm)	489 x 301 mm + 1	581 x 351 mm + 1	630 x 392 mm + 1
Weight approx.	approx. 13.5 kg	approx. 19 kg	approx. 21 kg
Power Supply DC Version AC Version	DC 24 V AC 100 to 253 V, 50 to 60 Hz	DC 24 V AC 100 to 253 V, 50 to 60 Hz	DC 24 V AC 100 to 253 V, 50 to 60 Hz
Input voltage range: DC Version AC Version	DC 24 V ± 10 % AC 90 to 253 V	DC 24 V ± 10 % AC 90 to 253 V	DC 24 V ± 10 % AC 90 to 253 V
Max. power dissipation DC 24 V	Standard operating: ca. 30 W Pmax. (without USB) < 55 W	Standard operating: ca. 40 W Pmax. (without USB) < 65 W	Standard operating: ca. 35 W Pmax. (without USB) < 60 W
Permissible ambient temperature	Operating: 0 °C up to +50 °C Storage: -20 °C up to +50 °C	Operating: 0 °C up to +50 °C Storage: -20 °C up to +50 °C	Operating: 0 °C up to +50 °C Storage: -20 °C up to +50 °C

Order details

1	7	-	7	2	V	6	-	*	*	*	*	*	*	0	0
								A	**B**	**C**	**D**	**E**	**F**		

A	Display sizes	1 – POLARIS Smart HMI 17,3" W 2 – POLARIS Smart HMI 21,5" W 3 – POLARIS Smart HMI 24,0" W
B	Input voltage	1 – AC 90 to 253 V 2 – DC 24 V
C	CPU Unit	4 – Intel® N 97 (quad-core up to 3.42.GHz) 6 – Intel® Core™ i5-1135G7 (quad-core up to 4.2 GHz)
D	RAM	Intel® N 97 1 – 8 GB 2 – 16 GB Intel® Core™ i5-1135G7 1 – 8 GB 2 – 16 GB 3 – 32 GB 4 – 64 GB
E	SSD	1 – 256 GB 2 – 512 GB 3 – 1 TB
F	Operating system	2 – Windows 10 IoT Enterprise 2021 LTSC (64 Bit) 3 – Windows 10 IoT Enterprise 2021 LTSC (64 Bit) and Zero Client APP 4 – Panel PC Windows 11 IoT Enterprise LTSC 2024 64 Bit

Complete order number. Please insert correct code.