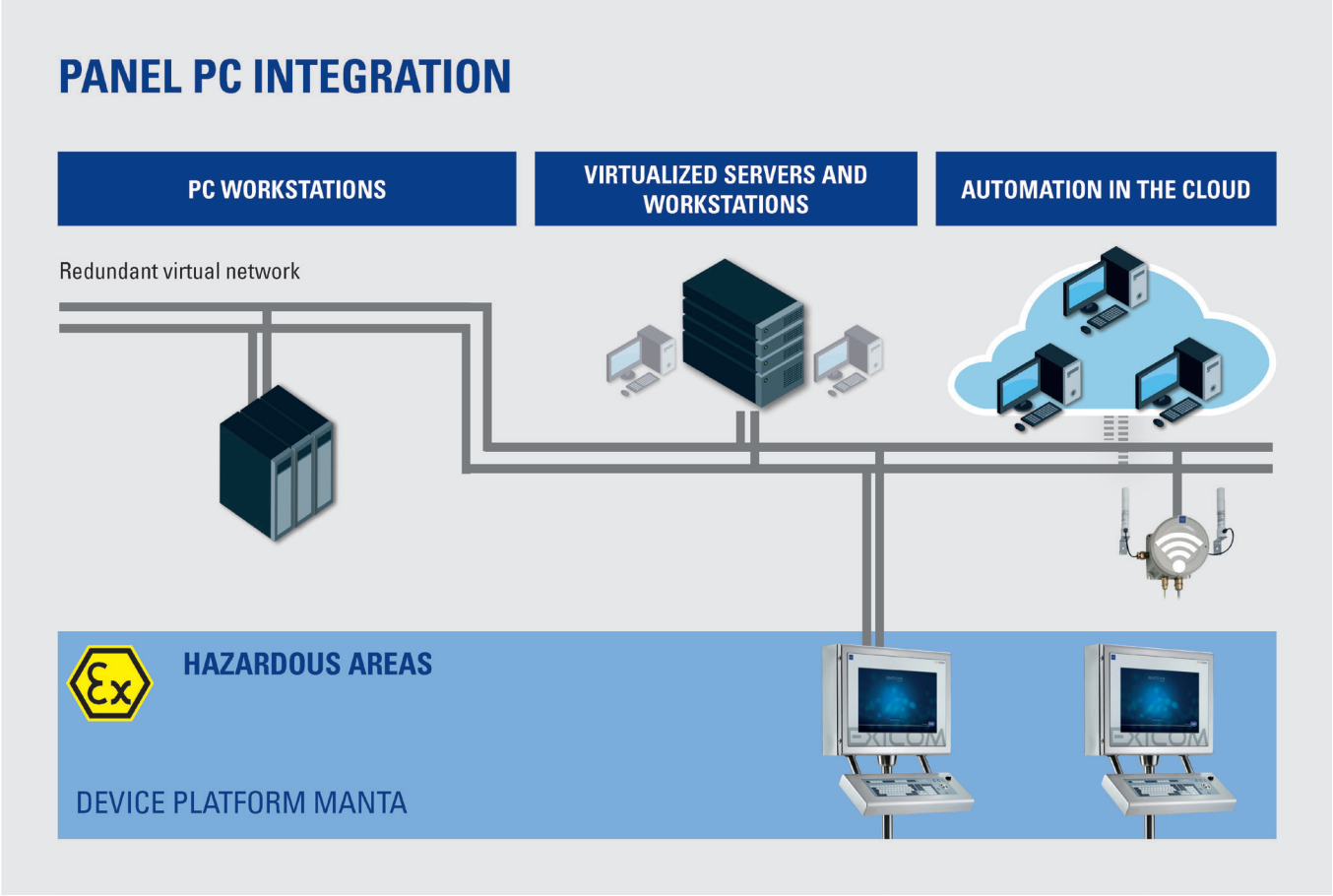
Operating and monitoring systems
Panel PC SERIES 400
Device platform MANTA
OS IT-487-TX

- Panel PC Operator Station, quad core ATOM E3845, 24"WU display, 1920 x 1200
- Stainless steel enclosure IP66, optional acc. to GMP, for installation in safe areas
- Optional resistive glass or foil touch screen
- Data is transmitted via Ethernet as 10/100Base-TX via CAT5 up to 100 m

MY R. STAHL **IT487A**

The OS IT-487 HMI series includes Panel PC Operator Stations for safe areas. Their brilliant 24"WU widescreen displays with a resolution of 1920 x 1200 pixels (format 16:10) are available with or without touch screen. The stainless steel enclosures (SS304 or SS316L) are available with a front opening or in cleanroom-compliant design and with different mounting options. Accessories include country-specific keyboards, pointer instruments and RFID and barcode readers, and different memory sizes and SSDs complement the quad core processors. Data is transmitted via Ethernet as 10/100Base-TX via CAT5 cable up to 100 m.



Technical Data

General	
Series	Operator Station OS IT-487 (discontinued)
Product description	24" Panel PC
HMI type	Operator Station
Technology	Panel PC
WebCode	IT487A
Explosion Protection	
Application range (zones)	Non-Ex
Electrical Data	
Rated operational voltage DC	24 V
Voltage range DC	20 – 30 V
Rated operational voltage AC	230 V
Voltage range AC	100 – 240 V
Power consumption DC	3 A
Power consumption AC 1	1 A
Protection fuse DC	5 AT
Protection fuse AC	5 AT
Rated operational power	typ. 50 W / 100 W at O30 / max. 150 W (typ. 170 BTU / 341 BTU at O30 / max. 510 BTU)
Processor type	ATOM E3845
Processor details	Intel Bay Trail (BT); 1.91 GHz; quad core
RAM	4 GB
Data memory	64 GB SLC 128 GB MLC
Graphics controller	integrated Intel Gen. 7 HD Graphics
Memory technology	SSD solid state flash drive M.2
Operating system	Windows Embedded Standard 7 (64-Bit) Windows 7 Ultimate (64-Bit) Windows 10 IoT Enterprise 2016 LTSB (64 bit) (included in standard delivery) Windows 10 IoT Enterprise 2016 LTSB (32 bit) (optional on USB stick)
Language support	via Windows operating system
Ethernet / Data	10/100Base-TX
Data cable	CAT5 installation cable AWG23
Data cable length	max. 100 m
Interface medium	CAT5 data transmission
Frequency range	50 – 60 Hz
Interface USB	2 x USB (Hub) 1 x USB (Root) 2 x USB (Hub) (keyboard, pointing device)
Interface serial	1 x RS-232
Interface audio	1 x Audio Line out
WLAN	optional via USB
Connections	via standard plug
Plug version USB	USB-A connector
Max. input voltage U_m	250 VAC
Real-time clock	Yes
Real-time clock data buffer	Lithium battery and capacitor buffered, maintenance-free

Electrical Data	
Battery buffered	> 5 years
Capacitor buffered	at least 4 days
Display	
Display version	TFT Colour display
Display version 2	16.7 million colours
Display size inch	24
Display size centimetres	61
Display resolution	WUXGA
Total pixels	1920 x 1200
Display dimensions	16:10
Display brightness	300 cd/m²
Display contrast	1000:1
Display viewing angle horizontal	178° at CR ≥5
Display viewing angle vertical	170° at CR ≥5
Display	Glass
Touchscreen	Optional resistive
Touchscreen technology	5-wire glass or membrane touch
Touchscreen activation	Foil touch: low activation pressure (0.1 up to max. 1 N) Glass touch: medium activation pressure (1.8 up to max. 2.5 N)
Touchscreen input method	Finger, gloved finger or stylus
Touchscreen durability	Foil touch: Polyester foil is easily scratched, with high pressure force the spacer dots could be damaged. Glass touch: Quite good, but with high pressure force the spacer dots could be damaged.
Touch screen scratch hardness MoHS	Foil touch: - Glass touch: >5
Touchscreen scratch hardness pencil test ISO15184	Foil touch: 3H Glass touch: 9H
Touchscreen transmissivity / optic	Foil touch: small milky effect due to the foil Glass touch: very good
Touchscreen surface contaminants	unaffected
Touchscreen abrasive resistance	36 million times with a silicone rubber of R8 finger, hitting rate 250 g at 2 times per second
Backlight	LED Technology
Backlight service life	50 000 h at +20 °C
Front plate (display)	Aluminium
Ambient Conditions	
Ambient temperature operation	-20 °C … +55 °C
Ambient temperature operation 1	-30 °C … +55 °C with heater version O30
Storage temperature	-30 °C … +70 °C
Cold start temperature	-10 °C
Temperature note 1	The O30 version is only available for the AC version devices !
Temperature note 2	Operating temperature +55 °C for a maximum of 5 h, for constant operation (24/7) +50 °C.
Temperature note 3	Cold start temperature: If the HMI device is switched on at a temperature below -10 °C the display will need a certain amount of time to warm up until everything is clearly visible. Depending on how low the temperature is, this process may last up to 3 hours.

Ambient Conditions	
Temperature note general	The temperature details apply to a standard device combination with display, keyboard and enclosure. Any additional built-in or added components may have an impact on / change these.
Heat dissipation	about 40 % via the front plate and 60 % via the enclosure
Relative humidity	10 to 90 % at +40 °C, non-condensing
Mechanical Data	
Dimensions (WxHxD)	740 mm x 872 mm x 400 mm
Material front	Aluminium / stainless steel
Material back	Stainless steel
Ingress protection	IP66
Weight	42.5 kg
Breather	optional
Mechanical data note	The mechanical data apply to an FR enclosure with display and keyboard. Other enclosure types as well as any additional built-in or added components may have an impact on / change these.
Mounting / Installation	
Enclosure type	Stainless steel enclosure (FR) optional GMP / clean room (CFR)
Mounting option	Wall, elbow, stand
Components	
Keyboard	optional, 107 keys with trackball / joystick / mouse / touchpad