

# Operating and Monitoring Systems

Thin Client SERIES 500

Device platform MANTA

OS IT-577-TX

STAHL



- Thin Client Operator Station, 24" display, Full HD 1920 x 1080
- 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
- Comfortable, central configuration with Remote Device Manager

## MY R. STAHL MANTAPCT-COSA

The OS IT-577-TX operator stations with MANTA device platform are Thin Clients for safe areas. Their brilliant 24" WU widescreen displays with a resolution of 1920 x 1080 pixels (format 16:9) are available with or without touch screen. The stainless steel enclosures (SS304 or SS316L) are available with a front opening in cleanroom-compliant design and with different mounting options. Configuration options include country-specific keyboards, pointer instruments, RFID readers and barcode readers, different memory sizes and SSDs. Data is transmitted via Ethernet as 10/100Base-TX via CAT5 cable up to 100 m.

## Technical Data

### General

Series	MANTA Panel PCs / Thin Clients Operator Stations
Product description	24" Thin Client
HMI type	Operator Station
Technology	Remote HMI Thin Client

### Explosion Protection

Application range (zones)	Non-Ex
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### Electrical Data

Power supply	230 VAC
Rated operational voltage AC	230 V
Voltage range AC	100 – 240 V
Frequency range	50 – 60 Hz
Power consumption AC 1	1 A
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 MLC 128 GB MLC
Graphics controller	integrated Intel Gen. 7 HD graphics
Memory technology	SSD solid state flash drive
Operating system	Windows 10 IoT Enterprise
Language support	via operating system
Image	Remote Firmware

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## Electrical Data

Ethernet / Data	10/100Base-TX
Data cable	CAT5 installation cable AWG23
Data cable length	max. 100 m
Interface medium	CAT5 Data transmission
Interface USB	2 x USB (Hub) 1 x USB (Root) 2 x USB (Hub) (keyboard, pointing device)
Interface serial	1 x RS-232
Interface reader note	RFID reader, support of the following standards: MIFARE Classic, DESFire, DESFire EV1, LEGIC prime and advant, NFC, INSIDE Secure, Sony FeliCa, ISO 14443A & 15693 1D/2D Barcode scanner: support of all common 1D/2D codes, wired or Bluetooth
Interface audio	1 x Audio Line out
WLAN	optional via USB
Connection compartment	Power supply direct in integrated connection box
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
Battery buffered	> 5 years
Capacitor buffered	at least 4 days

## Display

Display version	TFT Color display
Display version 2	16.7 million colours
Display size inch	24
Display size centimetres	61
Display resolution	1920 x 1080, 1680 x 1080, 1280 x 1024
Total pixels	1920 x 1080
Display dimensions	16:9
Display brightness	300 cd/m <sup>2</sup>
Display contrast	1000:1
Display viewing angle horizontal	178°
Display viewing angle vertical	170°
Touchscreen	optional, resistive glass or foil touchscreen
Touchscreen technology	5-wire glass or foil touch
Touchscreen activation	Foil touch: low activation pressure (0.1 to max. 1 N) Glass touch: medium activation pressure (1.8 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 the spacer dots could be damaged Glass touch: Satisfactory, but glass is not hardened, with high pressure 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

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## Display

Touchscreen transmissivity / optic	Foil touch: slightly milky effect due to foil Glass touch: very good
Touchscreen surface contaminants	unaffected
Touchscreen abrasive resistance	36 million activations with a silicone rubber finger R8, 250 g for 2 activations per second
Backlight	LED Technology
Backlight service life	50000 h at +20 °C
Front plate (display)	Aluminium and no touchscreen: glass foil touchscreen: polyester glass touchscreen: thin glass
Function keys	optional via keyboard with integrated trackball, joystick or touchpad
Softkeys	optional via keyboard with integrated trackball, joystick or touchpad
Cursor keys	optional via keyboard with integrated trackball, joystick or touchpad
Alphanumeric keys	optional via keyboard with integrated trackball, joystick or touchpad
System keys	optional via keyboard with integrated trackball, joystick or touchpad

## 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.
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.

## 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. They may change accordingly with other enclosure types as well as any additional built-in or added components.

## Mounting / Installation

Enclosure type	Stainless steel enclosure (FR) optional clean room (CFR)
Mounting option	Wall, elbow, stand

## Components

Keyboard	optional, 105 keys with trackball / joystick / touchpad
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