

# Operating and monitoring systems

Thin Client SERIES 500  
Device platform MANTA  
OS IT-587-FX

STAHL

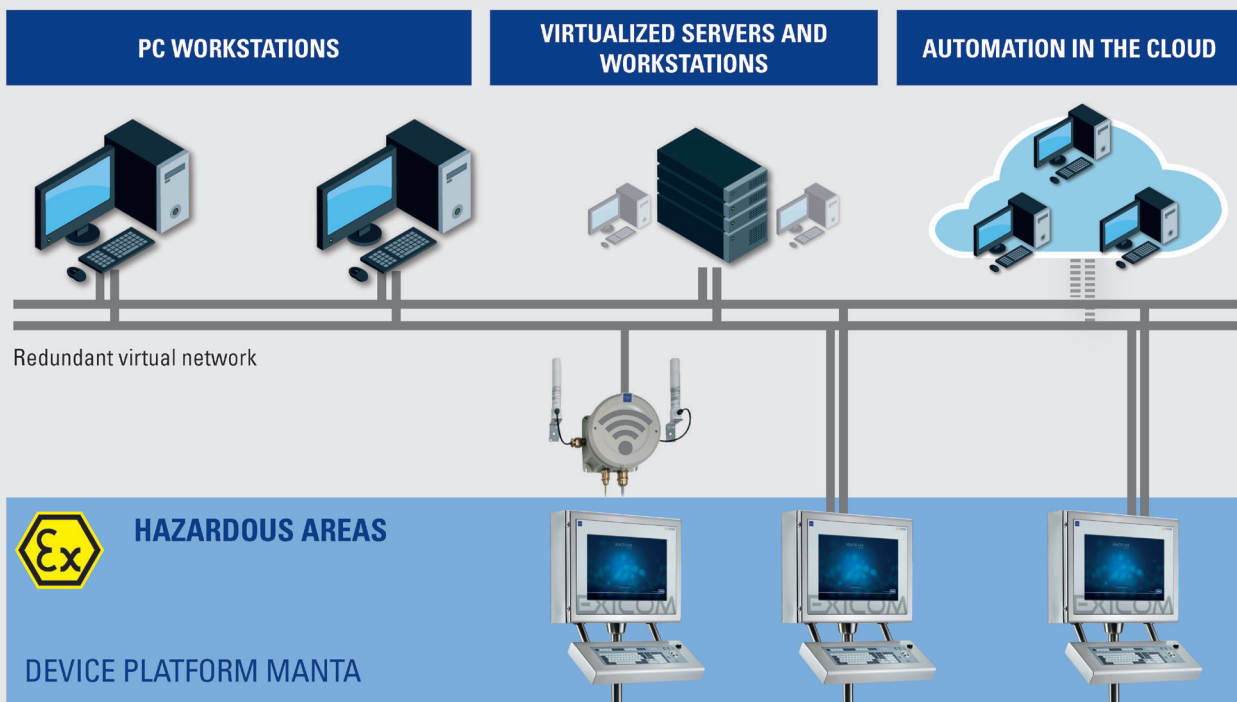


- Thin Client Operator Station, 24"WU display, 1920 x 1200
- Stainless steel enclosure IP66, optional acc. to GMP, for installation in safe areas
- Optional resistive glass or foil touch screen

## MY R. STAHL IT587A

The OS IT-587 HMI series includes Thin Client Operator Stations for safe areas. Their brilliant 24"WU widescreen displays with a resolution of 1920 x 1200 pixels (format 16:10), and 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. Country-specific keyboards, pointer instruments and RFID and barcode scanners are useful accessories making work easier and extending functionality. Data is transmitted via Ethernet as 100Base-FX via multi-mode fibre optic up to 2 km.

## THIN CLIENT INTEGRATION



## Technical Data

### General

|                     |   |
|---------------------|---|
| Series              | Operator Station OS IT-587 (discontinued) |
| Product description | 24" Thin Client                           |
| HMI type            | Operator Station                          |
| Technology          | Remote HMI Thin Client                    |
| WebCode             | IT587A                                    |

### 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  |
| Graphics controller          | integrated Intel Gen. 7 HD Graphics  |
| Memory technology            | SSD solid state flash drive M.2  |
| Operating system             | Windows 10 IoT Enterprise  |
| Language support             | via operating system   |
| Image                        | Remote Firmware  |
| Ethernet / Data              | 100Base-FX   |
| Data cable                   | 62.5/125 µm FO cable   |
| Data cable length            | max. 2000 m  |
| Interface medium             | Multi-mode optical fibre cable   |
| Frequency range              | 50 – 60 Hz   |
| Interface USB                | 2 x USB (Hub)<br>1 x USB (Root)<br>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 FO              | LC duplex connector  |
| 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  |

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## Electrical Data

|                    |                 |
|--------------------|-----------------|
| 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/m <sup>2</sup>   |
| 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)<br>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.<br>Glass touch: Quite good, but with high pressure force the spacer dots could be damaged. |
| Touch screen scratch hardness MoHS                | Foil touch: -<br>Glass touch: >5  |
| Touchscreen scratch hardness pencil test ISO15184 | Foil touch: 3H<br>Glass touch: 9H   |
| Touchscreen transmissivity / optic                | Foil touch: small milky effect due to the foil<br>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:<br>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.   |

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## Ambient Conditions

|                   |   |
|-------------------|---|
| 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)<br>optional GMP / clean room (CFR) |
| Mounting option | Wall, elbow, stand  |

## Components

|          |   |
|----------|---|
| Keyboard | optional, 107 keys with trackball / joystick / mouse / touchpad |
|----------|---|

We reserve the right to make alterations to the technical data, dimensions, weights, designs and products available without notice. The illustrations cannot be considered binding.