Operating and Monitoring Systems
KVM system SERIES 600
Device platform MANTA
OS IT-677-DVI3-CAT

STAHL

- KVM Operator Station, 24" display, Full HD 1920 x 1080
- For installation in safe areas
- Optional resistive glass or foil touch screen
- Data transmission via CAT5 copper cable up to 150 m

MY R. STAHL MANTAKVMO-SA

The OS IT-677-DVI3-CAT operator stations with MANTA device platform are KVM systems 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. Data is transmitted via CAT5 copper cable up to 150 m

Technical Data

General	
Series	MANTA KVM Operator Stations
Product description	24" KVM system
HMI type	Operator Station
Technology	Remote HMI KVM
Explosion Protection	
Application range (zones)	Non-Ex
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)
Transfer technology	KVM-DVI3
Operating system	independent
Language support	User menu: English
Ethernet / Data	CAT5
Data cable	CAT5 installation cable AWG 23
Data cable length	Max. 150 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

2025-04-16
V 0.63 EN

R. STAHL HMI Systems GmbH | Adolf-Grimme-Allee 8 | 50829 KÖLN
Tel. +49 221 768 06 1200 | +49 221 768 06 4200 | Email: sales.dehm@r-stahl.com | r-stahl.com

1/4

Electrical Data

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 in / 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

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/m²
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
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

2025-04-16
V 0.63 EN

R. STAHL HMI Systems GmbH | Adolf-Grimme-Allee 8 | 50829 KÖLN
Tel. +49 221 768 06 1200 | +49 221 768 06 4200 | Email: sales.dehm@r-stahl.com | r-stahl.com

2/4

STAHL

Display

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. They may change accordingly with any additional built-in or added components.
Relative humidity	10 to 90 % at +40 °C, non-condensing

Mechanical Data

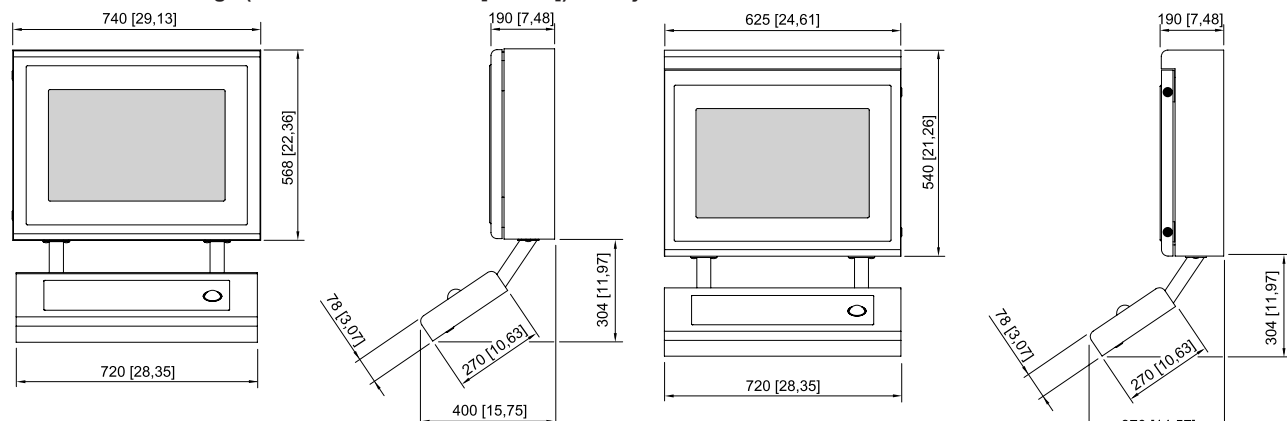|	
Dimensions (WxHxD)	740 mm x 872 mm x 400 mm
Material front	Aluminium / stainless steel
Material back	Stainless steel
Ingress protection	IP66
Weight	42.5 kg
Breather	optional
Mechanical data note	The mechanical data apply to an FR enclosure with display and keyboard. They may change accordingly with other enclosure types as well as any additional built-in or added components.

Mounting / Installation

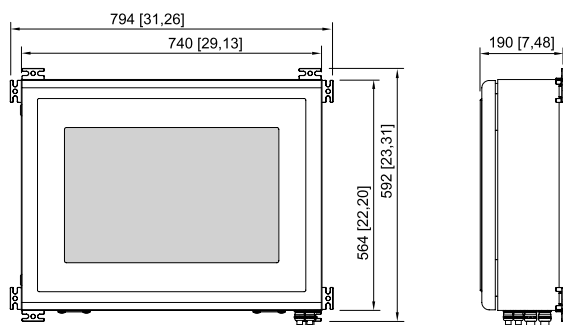|	
Enclosure type	Stainless steel enclosure (FR) optional clean room (CFR)
Mounting option	Wall, elbow, stand

Components

Keyboard	optional, 105 keys with trackball / joystick / touchpad

Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations

Operator Station FR enclosure

Operator Station CFR enclosure

2025-04-16
V 0.63 EN

R. STAHL HMI Systems GmbH | Adolf-Grimme-Allee 8 | 50829 KÖLN
Tel. +49 221 768 06 1200 | +49 221 768 06 4200 | Email: sales.dehm@r-stahl.com | r-stahl.com

3/4

Operating and Monitoring Systems

KVM system SERIES 600
Device platform MANTA
OS IT-677-DVI3-CAT

Operator Station FR enclosure, wall mounting

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.

2025-04-16
V 0.63 EN

R. STAHL HMI Systems GmbH | Adolf-Grimme-Allee 8 | 50829 KÖLN
Tel. +49 221 768 06 1200 | +49 221 768 06 4200 | Email: sales.dehm@r-stahl.com | r-stahl.com

4/4