

# Operating and monitoring systems

KVM system SERIES 600

Device platform MANTA

OS MT-677-DVI3-SM



- KVM Operator Station, 24" display, full HD 1920 x 1080
- Zone 2, 22 unit
- Optional resistive glass or foil touch screen
- Data transmission via single mode fibre optic up to 10 km.

WebCode MT677A

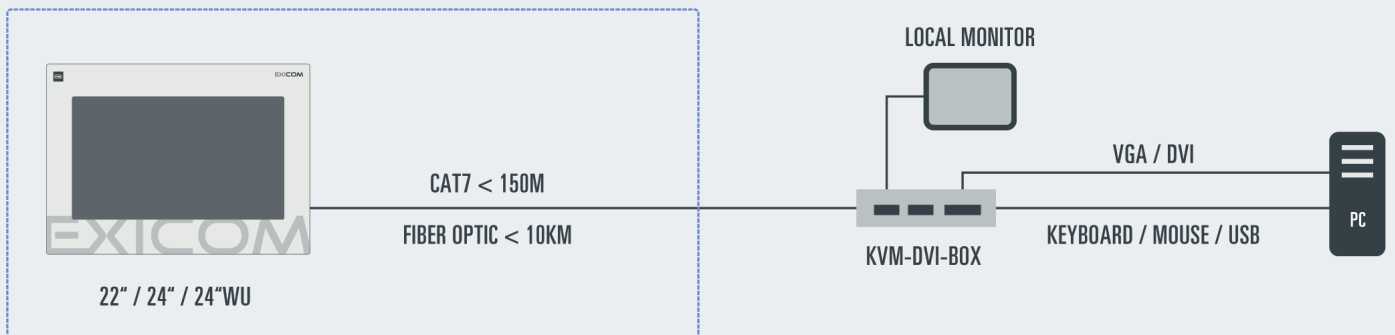


The OS MT-677-DVI3 HMI series includes KVM operator stations for hazardous zones 2 and 22. Their brilliant 24" widescreen displays with a resolution of 1920 x 1080 pixels (format 16:9), and are available with or without touch screen. The stainless steel enclosures (SS304 or SS316L) are available with 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 single mode fibre optic up to 10 km.

## KVM-SYSTEMS MANTA (SERIES 6X7)

Zone 1 / 2 / 21 / 22 – Class I, Zone 1 / Class I, Div 2 / Safe areas

SAFE AREA



## Technical Data

### General

Series	Product Series OS MT-677
Product description	24" KVM system
Technology	Remote HMI KVM
HMI type	Operator station
WebCode	MT677A

### Explosion Protection

Application range (zones)	2 22
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#### Explosion Protection

Certifications	ATEX, IECEx, EAC, CNEX
Certification IECEx	IECEx BVS 14.0034X
Certification ATEX	BVS 12 ATEX E 033 X
Certification EAC	TC RU C-DE.ГБ04.В00478
Certification CNEX	CNEx14.2205X
Certification note	The certificates and explosion protection markings 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.
Gas explosion protection IECEx	Ex nA nR [ja op is Ga] IIC T4 Gc
Dust explosion protection IECEx	Ex tc IIIC [ja op is Da] IP66 T110°C Dc
Gas explosion protection ATEX	II 3(1) G Ex nA nR [ja op is Ga] IIC T4 Gc
Dust explosion protection ATEX	II 3(1) D Ex tc IIIC [ja op is Da] IP66 T110°C Dc
Gas explosion protection EAC	2Ex nA nR ia [ja op is Ga] IIC T4 Gc X
Dust explosion protection EAC	Ex tc ia IIIC [ja op is Da] IP66 T110°C Dc
Gas explosion protection CNEX	Ex nA nR [ja op is Ga] IIC T4 Gc
Dust explosion protection CNEX	Ex tc IIIC [ja op is Da] IP66 T110°C Dc

#### Electrical Data

Power consumption AC 1	1 A
Power consumption DC	3 A
Transfer technology	KVM-DVI3
Ethernet / Data	Optical fibre single mode
Data cable	9/125 µm FO cable
Data cable length	max. 10 km
Interface medium	Single-mode optical fibre cable
Interface USB	2 x USB (Ex ia) 1 x USB (Ex nA) 2 x USB (Ex ia) (keyboard, pointing device)
Interface serial	1 x RS-232 (Ex nA)
Interface audio	1 x Audio Line in / out (Ex nA)
WLAN	optional via USB
Rated operational voltage AC	230 V
Voltage range AC	100 – 240 V
Rated operational voltage DC	24 V
Voltage range DC	20 – 30 V
Frequency range	50 – 60 Hz
Rated operational power	typ. 50 W / 100 W with O30 / max. 150 W (typ. 170 BTU / 341 BTU with O30 / max. 510 BTU)
Protection fuse AC	5 AT
Protection fuse DC	5 AT
Connection compartment	Power supply direct in integrated connection box
Connections	via spring clamp terminals, green
Wiring	flexible cable up to 2.5 mm <sup>2</sup> (AWG14) fixed cable up to 4 mm <sup>2</sup> (AWG12)
Max. input voltage Um	250 VAC
Plug version FO	LC duplex connector

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#### Display

Display version	TFT Colour display
Display version 2	16.7 million colours
Display size inch	24
Display size centimetres	61
Display resolution	Full HD
Total pixels	1920 x 1080
Display dimensions	16:9
Display brightness	300 cd/m <sup>2</sup>
Display contrast	1000:1
Touch screen	Optional resistive
Touch screen technology	5-wire glass or membrane touch
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.
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
Weight	58.5 kg
Material front	Aluminium / stainless steel
Material back	Stainless steel
Ingress protection	IP66
Breather	optional
Keyboard note	With a keyboard with trackball, the operator station's ingress protection is reduced to IP54, when the trackball is moved.
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 clean room (CFR)
Mounting option	Wall, elbow, stand

#### Components

Keyboard	optional, 107 keys with trackball / joystick / mouse / touchpad (Ex ia)
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