XV-152
MICRO PANEL



Powering Business Worldwide

2.3 Device versions



Fig. 1 XV-152

MICRO PANELs XV-152 are available in the following versions:

Basic device	Display	Communication interfaces	XV-152 type
Version D: ■ 1 Slot for 1 SD card ■ Integrated interfaces: 1 × Ethernet 100/10 1 × USB Device 1 × USB Host Communication interfaces ■ Windows CE Core 5.0 license (incl.)	Resistive touch, 5.7" TFT-LCD, 64k colors, VGA	RS232	XV-152-D0-57TVR...
		RS485 and RS232	XV-152-D4-57TVR...
		CAN, RS485 and RS232	XV-152-D6-57TVR...
		Profibus, RS485 and RS232	XV-152-D8-57TVR...
	Resistive touch, 8.4" TFT-LCD, 64k colors, VGA	RS232	XV-152-D0-84TVR...
		RS485 and RS232	XV-152-D4-84TVR...
		CAN, RS485 and RS232	XV-152-D6-84TVR...
		Profibus, RS485 and RS232	XV-152-D8-84TVR...
	Resistive touch, 10.4" TFT-LCD, 64k colors, VGA	RS232	XV-152-D0-10TVR...
		RS485 and RS232	XV-152-D4-10TVR...
		CAN, RS485 and RS232	XV-152-D6-10TVR...
		Profibus, RS485 and RS232	XV-152-D8-10TVR...

Tab. 1 Device versions

2.4 Package contents

The accessories supplied with the MICRO PANELs XV-152 depend on the size of the device.

2.4.1 5.7" and 8.4" devices

Qty	Designation
1	MICRO PANEL: ■ XV-152-D…-57TVR… or ■ XV-152-D…-84TVR…
4	Retaining brackets with threaded pin for mounting the device
1	Sealing strip for mounting the device
1	Power supply connector
1	Stylus

Tab. 2 Package contents for 5.7" and 8.4" devices

2.4.2 10.4" devices

Qty	Designation
1	MICRO PANEL: ■ XV-152-D…-10TVR…
6	Retaining brackets with threaded pin for mounting the device
1	Sealing strip for mounting the device
1	Power supply connector
1	Stylus

Tab. 3 Package contents for 10.4" devices

2.5 Accessories

Different accessories are available.

☞ **Order the accessories required from your supplier. Required accessories for:**
- **Mounting with increased protection class:**
  See Chapter 9.6 Enclosure ratings, 🗎 59.
- **Use in a potentially explosive atmosphere:**
  See Chapter 9.7 Agency approvals and standards, 🗎 59.

2.6 Designation

Nameplate

A nameplate is fixed on the rear of the device in order to identify it. The nameplate contains the following information:

- Manufacturer address
- Type designation
- Power supply required
- Part no.
- Serial no.
- Time of manufacturing (week/year)
- Approval marks
- Arrangement of interfaces and operating elements
- Permissible mounting options (top edge «Top»)

Support

To ensure fast and optimum support always provide the support personnel with the following information on the nameplate:

- Part no. (Part-No or Art.-No)
- Serial no.

9 Technical data

9.1 Dimensions and weights

9.1.1 5.7" devices

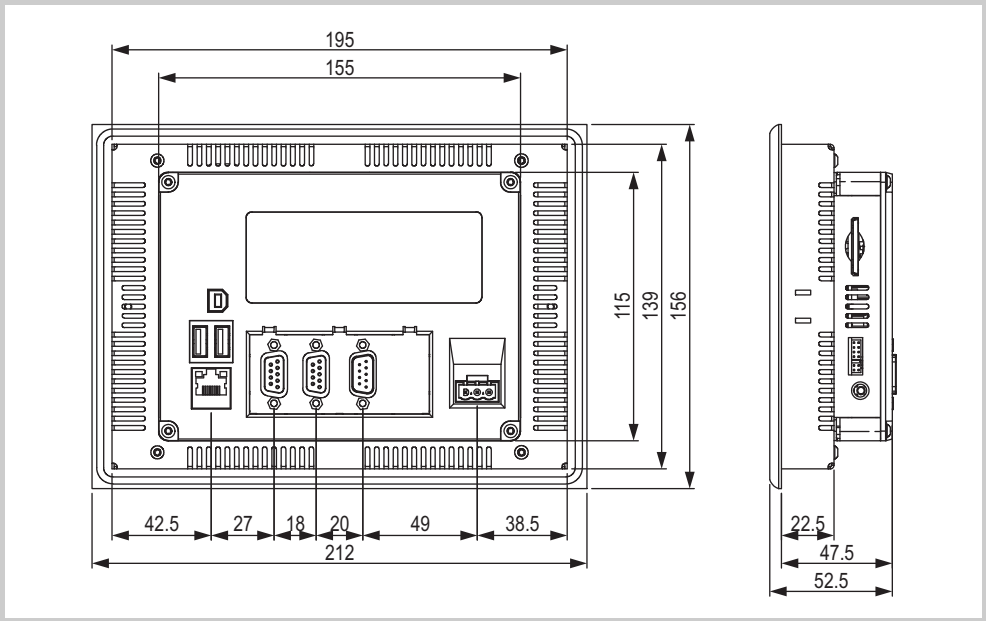


Fig. 27 Mechanical dimensions of the 5.7" devices in mm

Property	XV-152 5.7"
Height	156 mm
Width	212 mm
Depth	52.5 mm
Thickness of front plate	5 mm
Mounting depth	47.5 mm
Mounting cutout	198 mm × 142 mm (±1 mm)
Weight	Approx. 1.3 kg

Tab. 23 Dimensions and weights of the 5.7" devices

9.1.2 8.4" devices

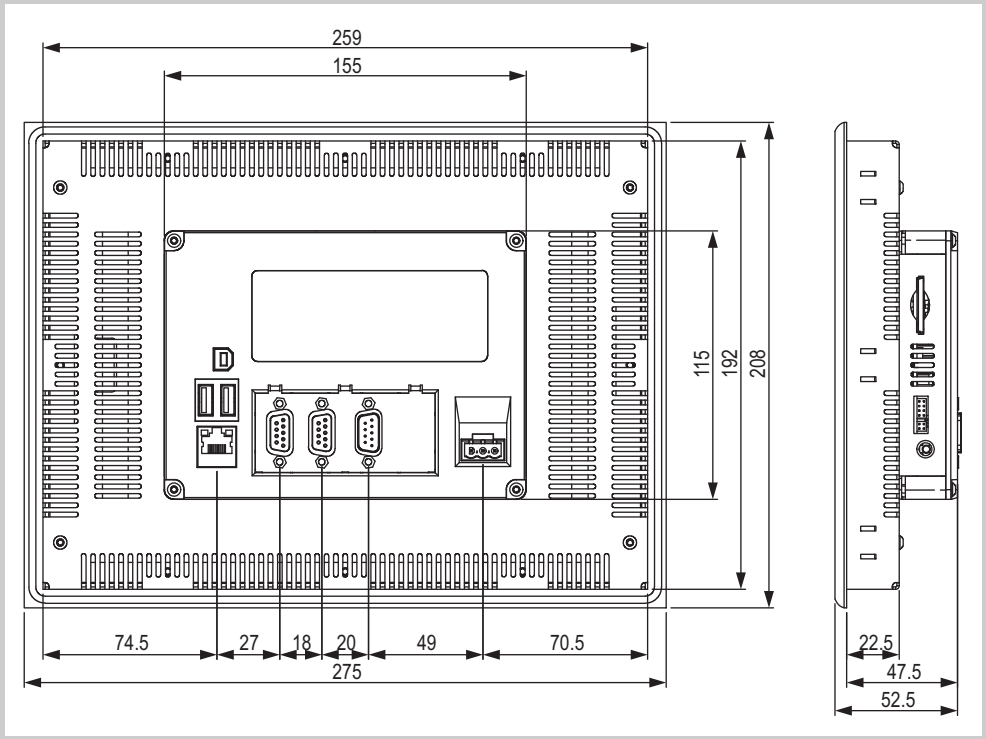


Fig. 28 Mechanical dimensions of the 8.4" devices in mm

Property	XV-152 8.4"
Height	208 mm
Width	275 mm
Depth	52.5 mm
Thickness of front plate	5 mm
Mounting depth	47.5 mm
Mounting cutout	261 mm × 194 mm (±1 mm)
Weight	Approx. 2.1 kg

Tab. 24 Dimensions and weights of the 8.4" devices

9.1.3 10.4" devices

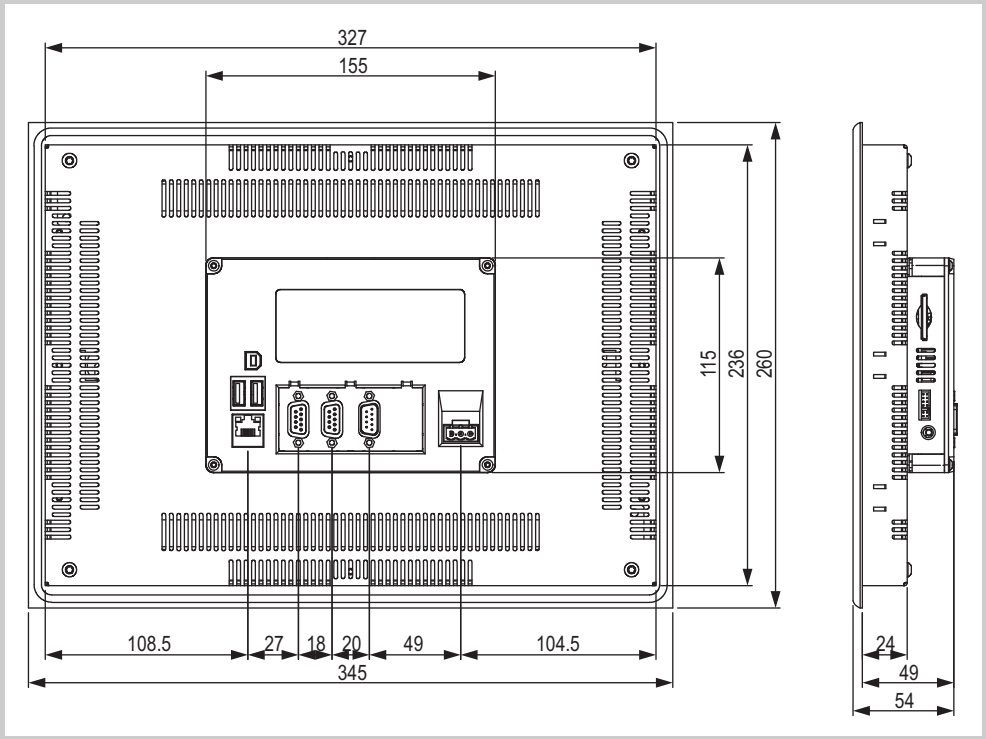


Fig. 29 Mechanical dimensions of the 10.4" devices in mm

Property	XV-152 10.4"
Height	260 mm
Width	345 mm
Depth	54 mm
Thickness of front plate	5 mm
Mounting depth	49 mm
Mounting cutout	329 mm × 238 mm (±1 mm)
Weight	Approx. 3.0 kg

Tab. 25 Dimensions and weights of the 10.4" devices

9.2 Display

Property	XV-152
Type	TFT-LCD
Resolution (W × H)	VGA (640 × 480 pixels)
Visible display area	
5.7" devices	115 mm × 86 mm (5.7" screen diagonal)
8.4" devices	170 mm × 128 mm (8.4" screen diagonal)
10.4" devices	211 mm × 158 mm (10.4" screen diagonal)
Color resolution	64k colors
Contrast ratio	Normally 300:1
Brightness	Normally 350 cd/m^2
Backlight	
Technology	LED, dimmable via software
Lifespan	Normally 40 000 h
Resistive touch back panel	Touch sensor (glass with foil)

Tab. 26 Display

9.3 Touch sensor

Property	XV-152
Type	Resistive touch
Technology	4-wire

Tab. 27 Touch sensor

9.4 System

Property	XV-152
Processor	RISC, 32-bit, 400 MHz
Internal memory	
DRAM	64 MByte
NAND Flash	64 MByte
NVRAM	125 KByte
NOR Flash	2 MByte
External memory	
SD memory card slot	1× SDA specification 1.00 Suitable for SD cards (**not** for SDHC cards or cards of newer standard)
Real-time clock (battery backup)	
Battery type	CR2032 (190 mA/h), maintenance-free (soldered)
Backup time in de-energized state	Normally 10 years

Tab. 28 System

9.5 Interfaces

Property	XV-152
Ethernet	100Base-TX / 10Base-T
USB Device	USB 2.0, not electrically isolated
Interfaces, depending on the device version:	
USB Host	USB 2.0 (1.5 / 12 Mbit/s), not electrically isolated
RS232 (System Port)	RS232, not electrically isolated
CAN	CAN, not electrically isolated
Profibus	Profibus, not electrically isolated, max. 1.5 Mbit/s
RS485	RS485, not electrically isolated
Power supply	→ Chapter 9.5.1, 🗎 58
DIAG	Only for service tasks
Jumper UPD/RUN	Only for service tasks

Tab. 29 Interfaces

9.5.1 Power supply

Property	XV-152
Rated voltage	24 VDC SELV (safety extra low voltage)
Permissible voltage	■ RMS value: 19.2 … 30.0 VDC (rated voltage -20 % / +25 %) ■ Absolute with ripple: 18.0… 31.2 VDC ■ Battery operation: 18.0… 31.2 VDC (rated voltage -25 % / +30 %) ■ 35 VDC for a period < 100 ms
Voltage dips	■ 10 ms from rated voltage (24 VDC) ■ 5 ms from undervoltage (20.4 VDC)
Power consumption	
5.7" devices	
Basic device	Max. 7 W
USB stations on USB host	Max. 2.5 W
Total	Max. 9.5 W
8.4" and 10.4" devices	
Basic device	Max. 12 W
USB stations on USB host	Max. 2.5 W
Total	Max. 14.5 W
Current consumption	
Continuous current	
5.7" devices	Max. 0.4 A (24 VDC)
8.4" and 10.4" devices	Max. 0.6 A (24 VDC)
Starting current inrush	1.5 A^2s
Protection against reverse polarity	Yes
Fuse	Yes (replacement only by the manufacturer or by an authorized repair center)
Potential isolation	No

Tab. 30 Power supply

9.6 Enclosure ratings

Property	XV-152
Front	IP65: Required accessories for mounting: ■ Additional set of retaining brackets (optional)
Rear	IP20

Tab. 31 Enclosure ratings

9.7 Agency approvals and standards

Property	XV-152
EMC	2004/108/EC
Explosion protection	II 3D Ex II T70°C IP5x (ATEX 94/9/EC): ■ Zone 22, category 3D: Required accessories for mounting: - Additional set of retaining brackets (optional)
UL	UL 508 (approval pending): File no. E205091

Tab. 32 Agency approvals and standards

9.8 Applicable standards and regulations

Property	XV-152
EMC (in relation to CE)	
EN 61000-6-2	Immunity for industrial areas
EN 61000-6-4	Emission for industrial environments
EN 61131-2	Programmable logic controllers, equipment requirements and tests
Explosion protection (in relation to CE)	
ATEX 94/9/EC: Zone 22, Category 3D (II 3D Ex II T70°C IP5x):	
EN 60079-0	Electrical apparatus for explosive gas atmospheres
EN 61241-1	Electrical apparatus for use in the presence of combustible dust
EN 13463	Non-electrical equipment for use in explosion hazardous areas

Property	XV-152
Safety	
EN 60950	Safety of information technology equipment
UL 508	Industrial Control Equipment
Product standards	
EN 50178	Electronic equipment for use in power installations
EN 61131-2	Programmable logic controllers, equipment requirements and tests

Tab. 33 Applicable standards and regulations

9.9 Ambient conditions

Property	XV-152
Temperature	
Operation	0 … 50°C
Storage / Transport	-20 … 60°C
Relative air humidity	10 … 95%, non-condensing
Vibration	According to IEC68-2-6
Shock	According to IEC68-2-27
Fall test	According to IEC68-2-32

Tab. 34 Ambient conditions