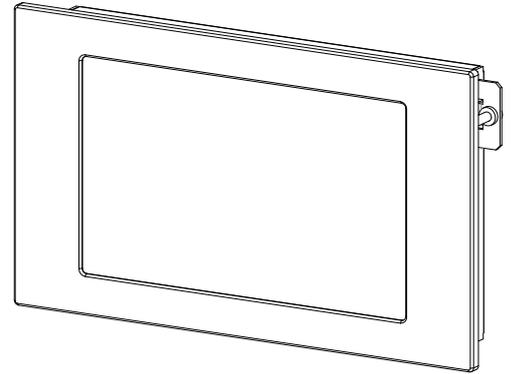# AMR-OP87/V

Control system with a graphic display

- **TFT 7″, (800 × 480) pixels**
- **Resistive touch panel**
- **RS485, Ethernet 10/100 Mbps**
- **Optional RS485 / RS232 / CAN / M-Bus**
- **Optional GSM**
- **Integrated web server**
- **MicroSD card slot**
- **Power supply 24 V DC**
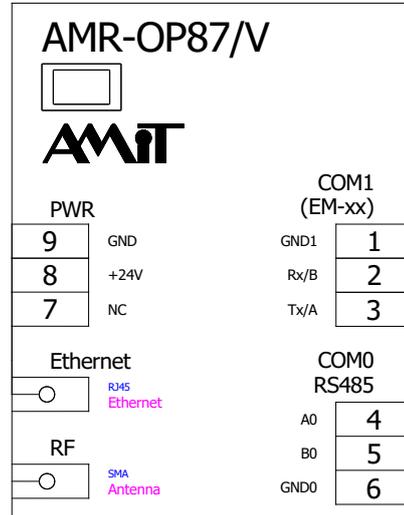- **Mounting into the front panel**

TECHNICAL DATA

Processor	STM32F437
Memory Flash / EEPROM	2 MB + 16 MB / 32 KB
Backed-up RAM memory	4 MB
RTC	CPU
Accuracy (25 °C)	±20 ppm
RAM + RTC back-up	Replaceable lithium battery CR2032
Battery lifetime	5 years in normal environment
Display	TFT, 7″
Resolution	(800 × 480) pixels
Visible area	(152.4 × 91.4) mm
Backlight / lifetime	White LED / 20,000 hours
Control	Resistive touch panel
Communication	
Serial communication interface	RS485 without GI (connector WAGO 231)
No. of units in a RS485 segment	256
Ethernet	10/100 Mbps (RJ45 connector)
Optional interfaces on the module [1]	RS485 with GI (EM-RS485 module) RS232 (Tx, Rx) (EM-RS232 module) CAN with GI (EM-CAN module) M-Bus (EM-MBUS5 module)
Optional interfaces on the module [1]	GSM (EMW-GSM module)
Power supply	12 V DC to 30 V DC
Maximum consumption	200 mA at 24 V DC
Other	
Ingress protection rate – front panel – rear panel	IP65 IP20
Operating temperature range	-20 °C to 70 °C
Maximum ambient humidity	< 95 % non-condensing
Mounting	Into the switchboard front panel
Weight	0.87 kg
Dimensions (w × h × d)	(218 × 130 × 52) mm
Programming	DetStudio / EsiDet

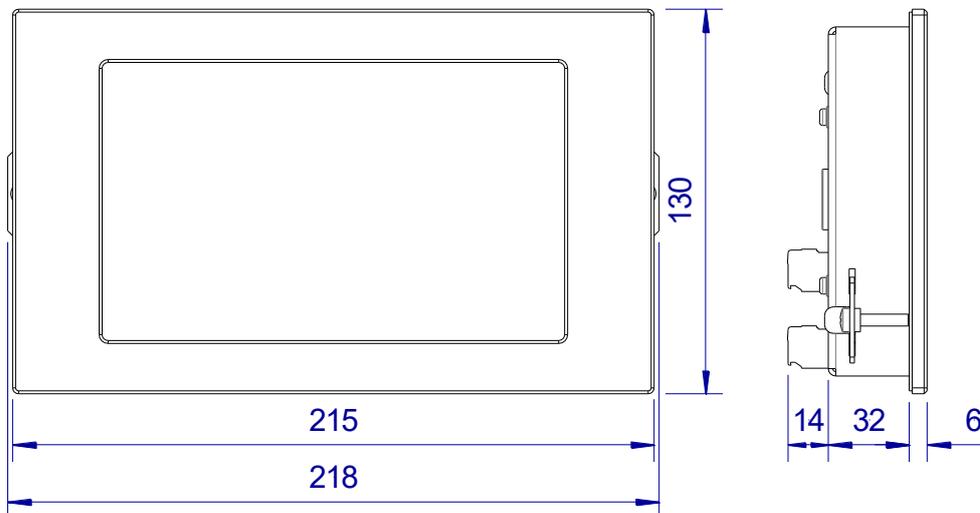[1]   Other modules availability depends on the current offer.

ORDERING INFORMATION

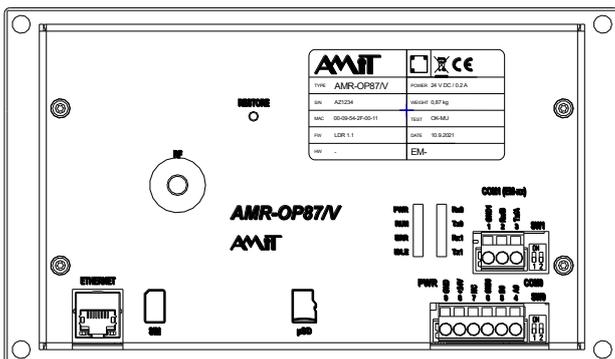| AMR-OP87/V	Control terminal, WAGO connectors, lithium battery, 2× mounting clamp
EM-RS485	Communication module for RS485 with galvanic isolation
EM-RS232	Communication module for RS232
EM-CAN	Communication module for CAN with galvanic isolation
EM-MBUS5	Communication module for M-Bus Master interface for up to 5 slave devices
EMW-GSM	Communication module for GSM
MD OPFIX1	2× Mounting clamp with a bolt

RECOMMENDED DRAWING SYMBOL

AMR-OP87/V

AMiT

PWR			COM1 (EM-xx)		
9	GND		GND1	1	
8	+24V		Rx/B	2	
7	NC		Tx/A	3	

Ethernet — RJ45 Ethernet

COM0 RS485

		A0	4
RF	SMA Antenna	B0	5
		GND0	6

MECHANICAL DIMENSIONS

215
218
130
14 32 6

DESCRIPTION OF TERMINALS

Communication module (COM1)

Terminal	Designation	Significance
1	GND1	Communication module, ground
2	Rx/B	According to the communication module
3	Tx/A	According to the communication module

RS485 (COM0)

Terminal	Designation	Significance
4	A0	RS485, signal A
5	B0	RS485, signal B
6	GND0	RS485, ground

Power supply

Terminal	Designation	Significance
8	+24V	Power supply, +24 V DC
9	GND	Power supply, ground

AMR-OP87/V

Control system with a graphic display

MOUNTING
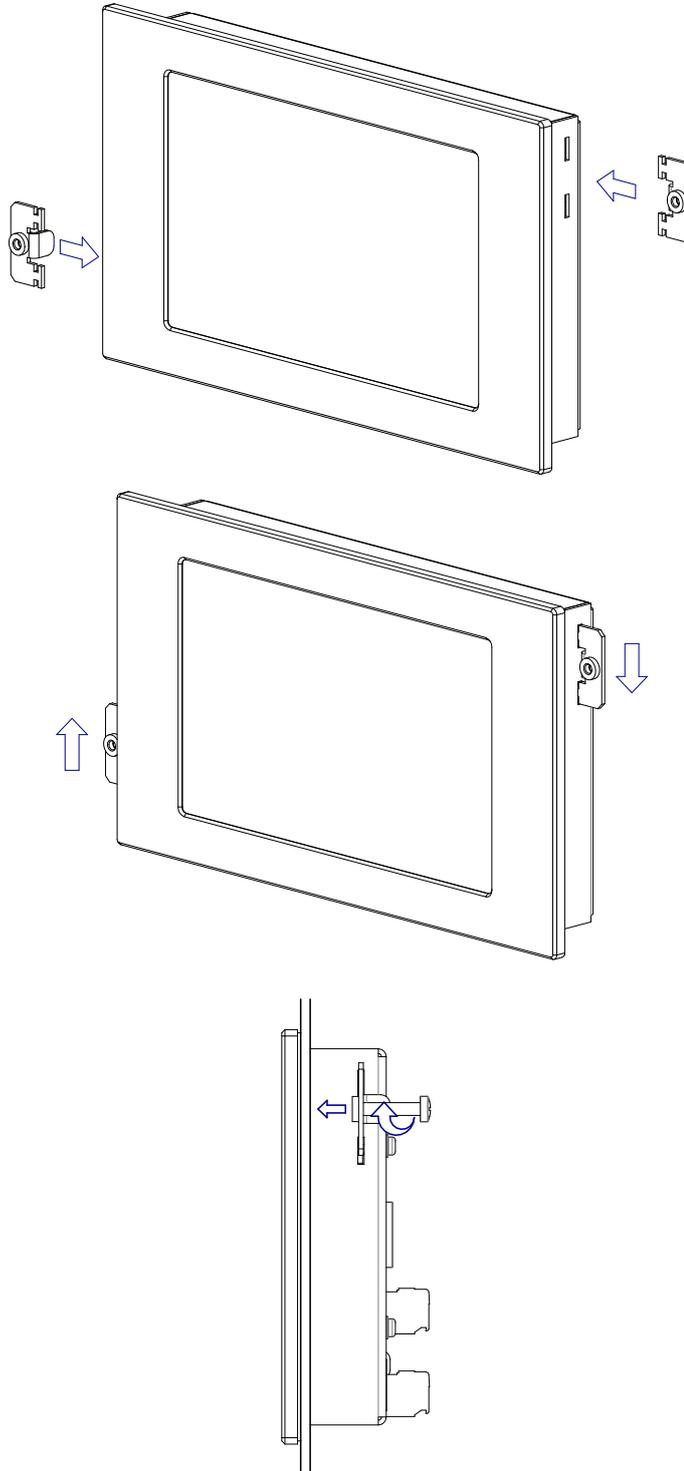
Data in this datasheet is tentative. Binding detailed information can be found in the operation manual (**amr-op87v_g_en_xxx.pdf**). Documentation and examples are available at amitomation.com.