INSTALLATION MANUAL

R-PASS

PRELIMINARY WARNINGS

The word **WARNING** preceded by the symbol ⚠ indicates conditions or actions that put the user's safety at risk. The word **ATTENTION** preceded by the symbol ⚠ indicates conditions or actions that might damage the instrument or the connected equipment. The warranty shall become null and void in the event of improper use or tampering with the module or devices supplied by the manufacturer as necessary for its correct operation, and if the instructions contained in this manual are not followed.

⚠	**WARNING**: The full content of this manual must be read before any operation. The module must only be used by qualified electricians. Specific documentation is available using the QR-CODE shown on page 1.
	The module must be repaired and damaged parts replaced by the Manufacturer. The product is sensitive to electrostatic discharges. Take appropriate measures during any operation.
	Electrical and electronic waste disposal (applicable in the European Union and other countries with recycling). The symbol on the product or its packaging shows the product must be surrendered to a collection centre authorized to recycle electrical and electronic waste.

DOCUMENTATION

**SENECA s.r.l.; Via Austria, 26 – 35127 – PADOVA – ITALY; Tel. +39.049.8705359 - Fax +39.049.8706287**

CONTACT INFORMATION

Technical support	support@seneca.it	Product information	sales@seneca.it

MODULE LAYOUT
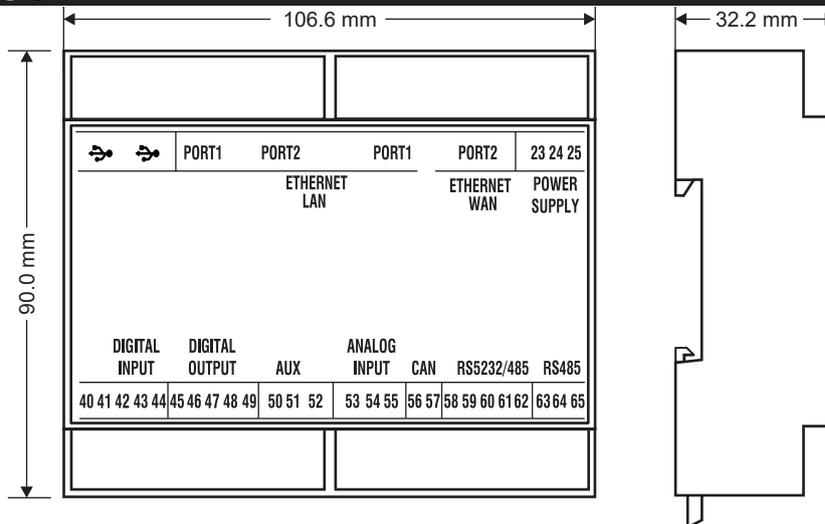
Weight: 170 g; **Enclosure:** UL94-V0 self-extinguishing PC/ABS material, black.

SIGNALS VIA LED ON FRONT PANEL

LED	STATUS	LED meaning
DO1....DO4	On	Output enabled
	Off	Output disabled
DI1...DI4	On	Input activated
	Off	Input deactivated
DO AUX	On	Auxiliary supply active
	Off	Fault or wiring error
STS (Status)	Flashing	The module is working correctly
	Off	Locking system
	On	Locking system
VPN	On	VPN connection active
	Flashing	VPN connection problems
SRV	On	VPN BOX "SERVICE" connection is working correctly
	Flashing	VPN BOX "SERVICE" connection in error
UPS	On	UPS active (only in the presence of the R-COMM accessory)
	Off	UPS inactive
LOG / RUN (only R-PASS-0 / -W)	On	Data Logger active and working correctly
	Flashing	Data Logger in error
	Off	Data logger not active
LOG / RUN (only R-PASS-S / -E)	On	PLC up and running
	Flashing	PLC in STOP
	Off	PLC not active
WIFI (only R-PASS-W)	On	WiFi enabled in Station mode
	Flashing	WiFi enabled in access-point mode
• 📶 📶 (only R-PASS-W)	On	WiFi signal strength in Station mode
PWR	On	Device powered correctly
RX1 / RX2	On	Incorrect RS485 / RS232 connection
	Flashing	Reception of data packet completed on RS485 / RS232
TX1 / TX2	Flashing	Transmission of data packet completed on RS485 / RS232
ETH ACT (Yellow)	Flashing	Packet transit on Ethernet port
ETH LNK (Green)	Flashing	Ethernet port connected

TECHNICAL SPECIFICATIONS

CERTIFICATIONS	https://www.seneca.it/products/r-pass/doc/CE_declaration
ENVIRONMENTAL CONDITIONS	Operating temperature: from -25°C to +65 °C Humidity: 10% ÷ 90% non condensing. Storage temperature: from -30°C to +80°C Protection rating: IP20
ASSEMBLY	35mm DIN rail IEC EN60715
CONNECTIONS	Removable 3.5mm pitch terminal block, 1.5mm^2 max cable section
COMMUNICATION PORTS	1 USB A connector 4 RJ45 Ethernet ports (only version with 4 Ethernet ports) 2 RJ45 Ethernet ports (only version with 2 Ethernet ports) 1 RS485/RS232 serial port configurable via software 1 RS485 serial port 1 micro USB dedicated to debugging
POWER SUPPLY	10 ÷ 40Vdc; 19 ÷ 28Vac; 8W max
INSULATION	1500 V~
DIGITAL OUTPUTS	OptoMOS® 30Vdc, 25mA max Number of channels: 4
DIGITAL INPUTS	Number of channels: 4, Absorbed current: 2.2mA Input voltage: 0÷30V, Threshold ON > 9V, Threshold OFF < 8V IEC6113-2 Type 1 & 3 compliant
ANALOGUE INPUTS	Voltage 0 ÷ 30Vdc, impedance 20kΩ Current 0 ÷ 25mA, impedance ~ 50Ω
AUXILIARY VOLTAGE OUTPUT	12Vdc; Max. 50mA
WI-FI (only R-PASS-W)	Integrated WiFi 802.11 b/g/n, 2.4 ÷ 2.4835GHz band, max Output Power: 17dBm (50mW)
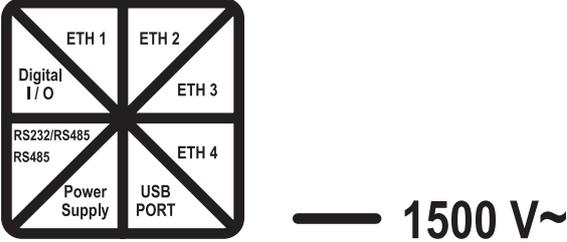
Through the lateral connection, it is possible to add optional modules.
For more information on accessories and optional modules, visit the website on page 1 or scan the QR-CODE.

ELECTRICAL CONNECTIONS

⚠ CAUTION

The upper power supply limits must not be exceeded, as this could cause serious damage to the module.
Switch the module off before connecting inputs and outputs.
To meet the electromagnetic immunity requirements:
- use shielded signal cables;
- connect the shield to a preferential instrumentation earth system;
- separate shielded cables from other cables used for power installations (transformers, inverters, motors, etc...).
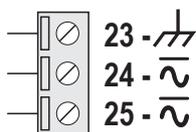
POWER SUPPLY	ANALOG INPUT VOLTAGE	ANALOG INPUT CURRENT
23 - 24 - ∿ 25 - ∿	55 - AI2 54 - AI1 53 - GND	55 - AI2 54 - AI1 53 - GND
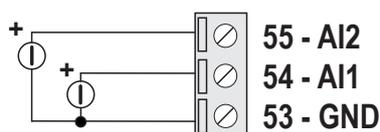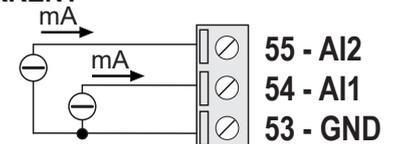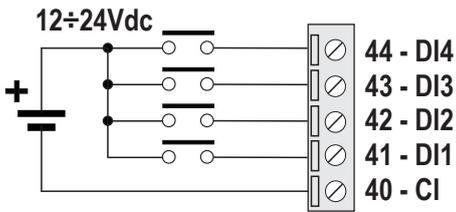
DIGITAL INPUT

12÷24Vdc

44 - DI4
43 - DI3
42 - DI2
41 - DI1
40 - CI

DIGITAL OUTPUT PNP

12÷24Vdc

45 - CO
46 - DO1
47 - DO2
48 - DO3
49 - DO4

LOAD
LOAD
LOAD
LOAD

DIGITAL OUTPUT NPN

12÷24Vdc

45 - CO
46 - DO1
47 - DO2
48 - DO3
49 - DO4

LOAD
LOAD
LOAD
LOAD

RS232 / RS485 (COM1)

58 - CC (COMMON)
59 - Tx (RS232)
60 - Rx (RS232)
61 - A (RS485)
62 - B (RS485)

RS485 (COM2)

63 - CC (COMMON)
64 - A
65 - B

CAN OPEN

53 - GND
56 - L
57 - H
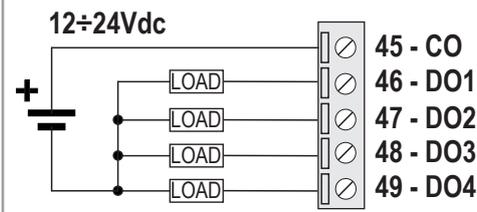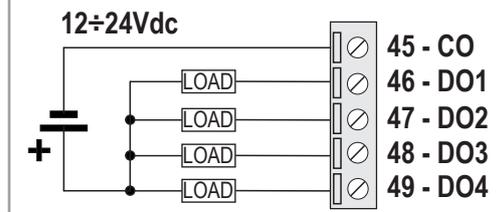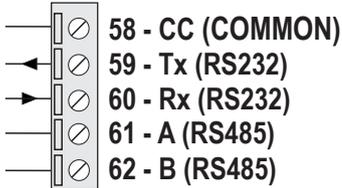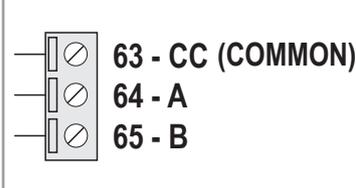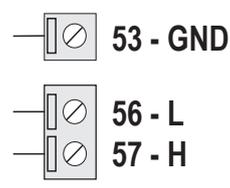
AUXILIARY POWER SUPPLY

50 - +12V
51 - +12V
52 - GND
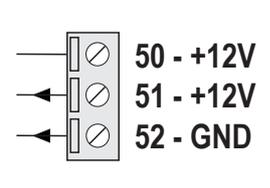
DIP-SWITCH

The DIP-SWITCHES on the back of the device have the following functions:

SW1				
DIP1	RESERVED	DIP3	ON	DEFAULT SETTINGS
DIP2	RESERVED	DIP4	ON	

To access the DIP-SWITCH it is necessary to remove the bottom of the instrument.

ETHERNET CONNECTION RULES

For the Ethernet cabling between the devices, the use of the unshielded CAT5 or CAT5e cable is required.

FACTORY IP ADDRESS

The default module IP address is static: 192. 168. 90. 101 (LAN)

WEB SERVER

To access the configuration web server with the factory IP address above, use the following credentials:
Username: admin; **Password**: admin; **Port**: 8080

Example: To access the web server from LAN port: http://192. 168. 90. 101:8080

⚠ CAUTION
DO NOT USE DEVICES WITH THE SAME IP ADDRESS IN THE SAME ETHERNET NETWORK.