



# process meter with bargraph inputs: 0/4-20 mA, 0/1-5V, 0/2-10V 0, 2 or 4 REL / OC outputs analogue output: active or passive, power supply output: 24V DC RS-485 / Modbus RTU signal peak value detection free configuration software S-Config

The **SRL-49** meter is designed for measuring of typical current or voltage signals. The readout is presented simultaneously on a four-decade LED display and a 20-point, two-colour bargraph covering the full measuring range. Thanks to wide range of characteristic curves (linear, square root, quadratic, user-defined and volume characteristic for cylindrical tanks) the meters may be used in various process control systems. The 24V DC / 100 mA output is designed to supply measuring transducers, and the RS-485 port enables data transmission in production process monitoring systems. The REL / OC control outputs can adjust the level of measured signal and are controlled according to one or two threshold values. Moreover, the meter can be equipped with analogue outputs, according to the customer selection: active current output, passive isolated current output or active voltage output. The meter can be configured with the local keyboard or free S-Config software via the RS-485 communication port.

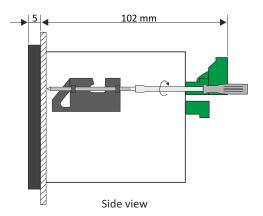
# **TECHNICAL DATA**

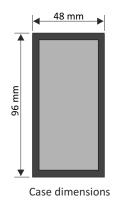
Power supply Power consumption	19V ÷ 50V DC; 16V ÷ 35V AC or 85 ÷ 260V AC/DC, all separated for 85 ÷ 260V AC/DC and 16V ÷ 35V AC power supply: max. 4,5 VA; for 19V ÷ 50V DC power supply: max. 4,5 W
Display	LED, red, 4 x 9 mm high + 20-points bargraph, red-green, brightness adjustable in 8 steps
Displayed values	-999 ÷ 9999 + decimal point
Input	current: 0-20 mA or 4-20 mA, programmable, input resistance < 65 $\Omega$ (typ. 55 $\Omega$ ), overload-protected, input current limited to 40 mA; voltage: 0-5V, 1-5V, 0-10V or 2-10V, programmable, input resistance > 50 kΩ
Accuracy	0.1% @25°C ± one digit
Stability	50 ppm/°C
Binary outputs	0, 2 or 4 x REL I <sub>max</sub> =1A, U <sub>max</sub> =30VDC/250VAC (cosø=1) or OC I <sub>max</sub> =30MA, U <sub>max</sub> =30VDC, P <sub>max</sub> =100mW
Analogue output (available with 2 x REL or OC, see ordering)	active current: operating range 0/4-20 mA (max. 0-24 mA), load resistance 700 $\Omega$ max., resolution 13 bit passive current: isolated, operating range 4-20 mA (max. 2,8-24 mA), load resistance 600 $\Omega$ @24VDC, resolution 13 bit active voltage: operating range 0/1-5V, 0/2-10V (max. 0-11V), load resistance min. 2000 $\Omega$ , resolution 13 bit
Power supply output	24V DC +5%, -10% / max. 100 mA, stabilized
Communication interface	RS-485, 8N1 and 8N2, 1200 bit/s ÷ 115200 bit/s, Modbus RTU (not galvanically isolated)
Operating temp.	0°C ÷ +50°C (standard), -20°C ÷ +50°C (option)
Storage temp.	-10°C ÷ +70°C (standard), -20°C ÷ +70°C (depending on option)
Protection class	IP 65 (front side when an optional seal is installed); IP 40 (front side); IP 20 (case and connection clips)
Case	panel mounting; material: NORYL - GFN2S E1
Dimensions	case (WxHxD): 48 x 96 x 100 mm panel cut-out dimensions: 43 x 90,5 mm installation depth: min. 102 mm board thickness: standard 7 mm or other depending on used board thickness brackets (see Accessories)
Weight	220 g max.

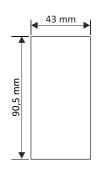


# **J** simex

# **DIMENSIONS**

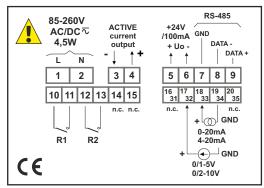


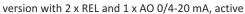


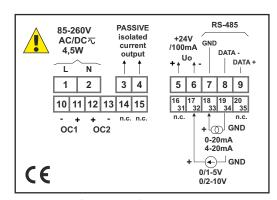


Panel cut-out dimensions

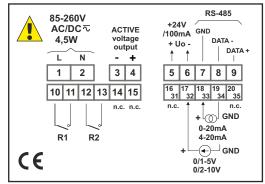
### **EXAMPLARY PIN ASSIGNMENTS**



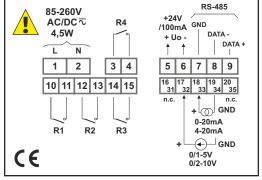




version with 2 x OC and 1 x AO 4-20 mA, passive

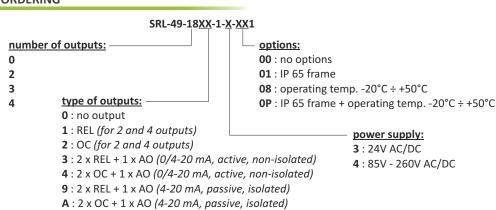


version with 2 x REL and 1 x AO 0/1-5V, 0/2-10V, active



version with 4 x REL

# **ORDERING**

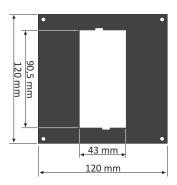


**B**: 2 x REL + 1 x AO (0/1-5V, 0/2-10V, active, non-isolated) **C**: 2 x OC + 1 x AO (0/1-5V, 0/2-10V, active, non-isolated)

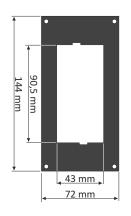


# **J** simex

### **MOUNTING PLATES**



SMP-99/94 to mount 48 x 96 mm size unit in place of 96 x 96 mm cut-out



SMP-147/94 to mount 48 x 96 mm size unit in place of 144 x 72 mm cut-out

# **BOARD THICKNESS BRACKETS / ADAPTORS**



1 ÷ 7 mm board thickness brackets (2 pcs) standard included with device

SPH-07



SPH-45 1 ÷ 45 mm board thickness brackets (2 pcs)



SPH-05 1 ÷ 5 mm board thickness brackets (2 pcs)



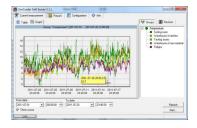
**SRH-99** brackets for mounting devices on DIN 35/7.5 or 15 rail (2 pcs)

# **SOFTWARE**



S-Config 2 is used for the simultaneous detection of devices in multiple Modbus RTU networks and allows user to change the configuration of most of them. For each detected device a list of its registers, which the user can modify, is displayed and also additional informations about device parameters (type, address in the network, etc.).

S-Config software can be downloaded from SIMEX website at www.simex.pl



SimCorder Soft is a visualisation application created to facilitate work with advanced networks of the SIMEX devices, for acquisition, visualisation, reporting, archiving, exporting and printing of measurement data from all network devices. You can download measurements from the devices automatically or on demand. There is a possibility of immediate notification about emergency states via SMS or e-mail, which will often allow to quickly resolve an arising problem while avoiding long and expensive stoppages. You can view the measurement data, emergency states and configuration via the internet at every time.

# **CONVERTERS**



The SRS-U4 module is designed to connect a USB host to slave devices equipped with RS-485 interface. The PC with special software can be used as a host. The SRS-U4 unit guarantees full galvanic isolation between USB and RS-485 circuits. The converter can work with any devices equipped with RS-485 interface and contains integrated circuit which supports USB 1.1 and USB 2.0 standards. The main purpose is connection of PC host computer with industrial data acquisition and visualisation systems based on RS-485 interface.

The **SRS-U4** can be also manufactured with DIN mounting adaptor.

