

Process meters



SRP-94



SRP-946

SRP-94 / SRP-946

- ❑ process meter with a large, 20 mm high, LED display
- ❑ extended displayed values range up to 6 digits: -99999 ÷ 999999
- ❑ inputs: 0/4-20 mA, 0/1-5V, 0/2-10V, 0-60/75/100/150 mV
- ❑ 0, 2 or 4 REL / OC outputs
- ❑ analogue output: active or passive, sensor supply output: 24V DC
- ❑ RS-485 / Modbus RTU
- ❑ signal peak value detection
- ❑ free configuration S-Config software

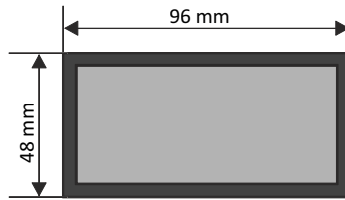
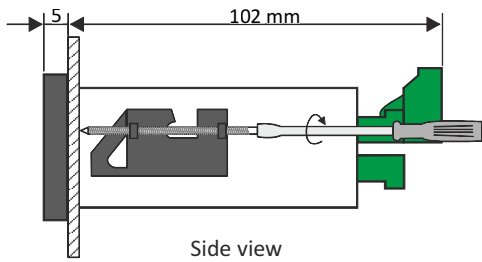
The SRP-94(6) meter is designed for measuring of typical current or voltage signals. The readouts are presented on well-readable display with standard range of four digits or five/six digits for more demanding applications (e.g. measurement range: 4 - 20 mA, indications range: 0 - 20 000 kg). Thanks 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

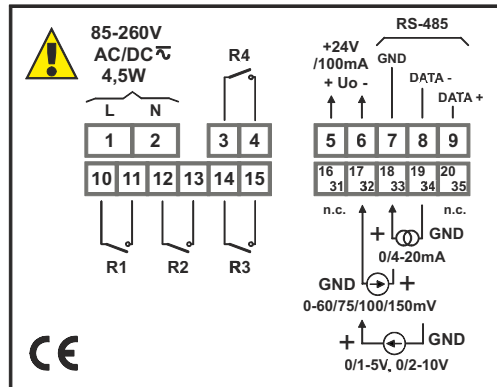
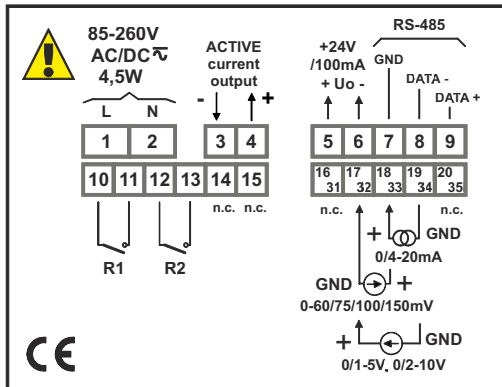
Power supply	19V ÷ 50V DC; 16V ÷ 35V AC or 85 ÷ 260V AC/DC, all separated
Power consumption	for 85 ÷ 260V AC/DC and 16V ÷ 35V AC power supply: max. 4,5 VA; for 19V ÷ 50V DC power supply: max. 4,5 W
Display	LED, 4 x 20 mm or 6 x 13 mm high, red (green - on request), brightness adjustable in 8 steps
Displayed values	-999 ÷ 9999 or -99999 ÷ 999999 + decimal point
Input	<u>current</u> : 0-20 mA or 4-20 mA, programmable, input resistance < 65 Ω (typ. 55 Ω), overload-protected, input current limited to 40 mA; <u>voltage</u> : 0-5V, 1-5V, 0-10V or 2-10V, programmable, input resistance > 50 kΩ <u>milivoltage</u> : 0-60 mV, 0-75 mV, 0-100 mV, 0-150 mV; programmable; input resistance > 100 kΩ accepted prolonged input overload: 20%
Accuracy	0.1% @25°C ± one digit (for 0-20 mA range)
Stability	50 ppm/°C
Binary outputs	0, 2 or 4 x REL I _{max} =1A, U _{max} =30VDC/250VAC (cosφ=1) or OC I _{max} =30mA, U _{max} =30VDC, P _{max} =100mW
Analogue output (available with 2 x REL or OC, see ordering)	<u>active current</u> : operating range 0/4-20 mA (max. 0-24 mA), load resistance 700 Ω max., resolution 13 bit <u>passive current</u> : isolated, operating range 4-20 mA (max. 2,8-24 mA), load resistance 600 Ω@24VDC, resolution 13 bit <u>active voltage</u> : operating range 0/1-5V, 0/2-10V (max. 0-11V), load resistance min. 2000 Ω, 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.	-20°C ÷ +70°C
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	<u>case (WxHxD)</u> : 96 x 48 x 100 mm <u>panel cut-out dimensions</u> : 90,5 x 43 mm <u>installation depth</u> : min. 102 mm <u>board thickness</u> : standard 7 mm or other depending on used board thickness brackets (see Accessories)
Weight	230 g max.

Process meters

DIMENSIONS



EXAMPLARY PIN ASSIGNMENTS



ORDERING

SRP-X-1XXX-1-X-XX1

display:

- 94 : 4-digits
- 946 : 6-digits

type of input:

- 8 : 0-20 mA, 4-20 mA, 0/1-5V, 0/2-10V
- C : 0-60/75/100/150 mV

number of outputs:

- 0
- 2
- 3
- 4

type of outputs:

- 0 : no output
- 1 : REL (for 2 and 4 outputs)
- 2 : OC (for 2 and 4 outputs)
- 3 : 2 x REL + 1 x AO (0/4-20 mA, active, non-isolated)
- 4 : 2 x OC + 1 x AO (0/4-20 mA, active, non-isolated)
- 9 : 2 x REL + 1 x AO (4-20 mA, passive, isolated)
- A : 2 x OC + 1 x AO (4-20 mA, passive, isolated)
- 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)

options:

- 00 : no options
- 01 : IP 65 frame
- 03 : green colour LED display
- 04 : IP 65 frame + green colour LED display
- 08 : operating temp. -20°C ÷ +50°C
- 0P : IP 65 frame + operating temp. -20°C ÷ +50°C
- 0L : green colour LED display + operating temp. -20°C ÷ +50°C
- 0T : IP 65 frame + green colour LED display + operating temp. -20°C ÷ +50°C

power supply:

- 3 : 24V AC/DC
- 4 : 85V - 260V AC/DC

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