



## SRT-73

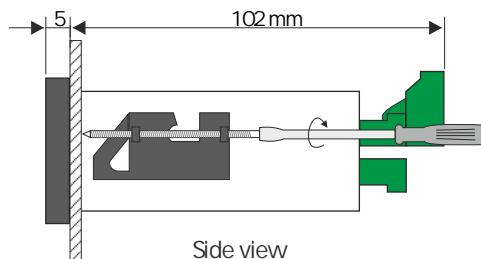
- temperature meter in a small case
- 2 display types: 4 x 13 mm or 5 x 9 mm
- input: thermoresistance or thermocouple
- 0, 1 or 2 relay (or OC) outputs
- RS-485 / Modbus RTU
- automatic recognition of 3 and 4-conductor connection (RTD inputs)
- automatic compensation of TC cold ends temperature
- free configuration software S-Config

The SRT-73 meter is designed for temperature measurements. The device is equipped with one resistance-type Pt100/500/1000 input or thermocouple input which can operate with K, S, J, T, N, R, B, and E type thermocouples. The inputs feature with fully linearized characteristics. The device with thermocouple input has additional measurement range (-10 ÷ 90 mV) mainly for diagnostics of measurement circuits. The 24VDC / 100 mA output is designed to supply measuring transducers, and the RS-485 port enables data transmission in production process monitoring systems. The relay / OC control outputs can adjust the level of measured signal and are controlled according to one or two threshold values. The meter can be configured with the local keyboard or free S-Config software via the RS-485 communication port.

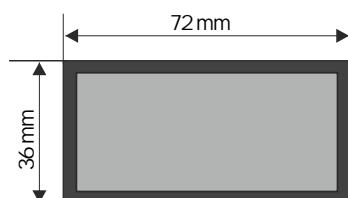
### TECHNICAL DATA

Power supply	19V ÷ 50V DC; 16V ÷ 35V AC or 85 ÷ 260V AC/DC or 12V AC/DC, all separated
Power consumption	for 12V AC/DC, 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	<u>standard</u> : LED, two-coloured (red-green), 4 x 13 mm (IP 40); <u>option</u> : LED, red, 5 x 9 mm (IP 65)
Displayed values	-999 ÷ 9999 + decimal point
Input	<u>thermoresistance</u> : Pt100, Pt500, Pt1000 (automatic recognition of 3 and 4-conductor connection, resistance compensation of connecting conductors from 0 to 20 mΩ at any conductor); measuring range: -100°C ÷ 600°C; resolution: 0,1°C <u>thermocouple</u> : type K, S, J, T, N, R, B, E; measuring range: K: -200°C ÷ +1370°C; S: -50°C ÷ +1768°C; J: -210°C ÷ +1200°C; T: -200°C ÷ +400°C; N: -200°C ÷ +1300°C; R: -50°C ÷ +1768°C; B: +250°C ÷ +1820°C; E: -200°C ÷ +1000°C; resolution: 1°C, additional range -10 ÷ +90 mV
Accuracy	0,1% @ 25°C ± one digit
Stability	50 ppm/°C
Outputs (option)	0, 1 or 2 x relay (REL) NO 5A/250V AC (resistance), 3A/250V AC (reactance) or OC I <sub>max</sub> =30mA, U <sub>max</sub> =30VDC, P <sub>max</sub> =100mW
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	depending on display size: <u>5 x 9 mm display</u> : IP 65 (front), optional integrated frame for panel cut-out sealing; IP 20 (case and connection clips) <u>4 x 13 mm display</u> : IP 40 (front); IP 20 (case and connection clips)
Case	panel mounting; material: NORYL - GFN2SE1
Dimensions	<u>case (WxHxD)</u> : 72 x 36 x 97 mm <u>panel cut-out dimensions</u> : 66.5x32.5mm <u>installation depth</u> : min. 102mm <u>board thickness</u> : standard 7 mm or other depending on used board thickness brackets (see Accessories)
Weight	162 g max.

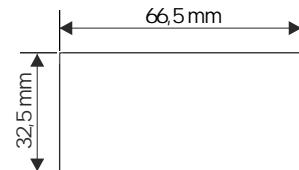
## DIMENSIONS



Side view

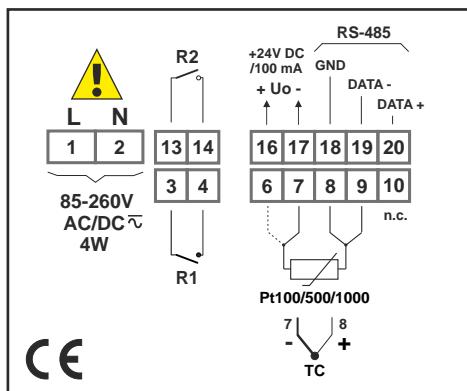


Case dimensions

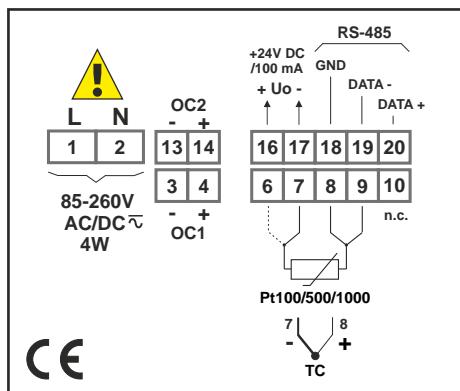


Panel cut-out dimensions

## EXAMPLARY PIN ASSIGNMENTS



version with 2x REL



version with 2x OC

## ORDERING

SRT-73-1XXX-1-X-XX1

type of input: \_\_\_\_\_

3: thermoresistance  
A : thermocouple

type of outputs: \_\_\_\_\_

0: no output  
11 : 1 x REL  
12: 1 x OC  
21 : 2x REL  
22: 2x OC

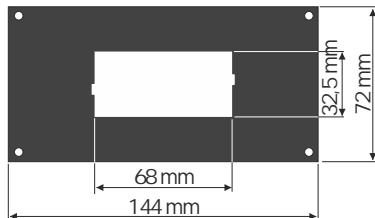
options:

00: no options  
01 : integrated frame for panel cut-out sealing  
08: operating temp. -20°C ÷ +50°C  
OP : integrated frame for panel cut-out sealing  
+ operating temp. -20°C ÷ +50°C

power supply:

3: 24V AC/DC  
4: 85V ÷ 260V AC/DC  
5: 12V AC/DC

## MOUNTING PLATES



SMP-147/73  
to mount 72 x 36 mm  
size unit in place  
of 144 x 72 mm cut-out

## BOARD THICKNESS BRACKETS / ADAPTORS



SPH-07  
1 ÷ 7 mm board thickness brackets (2 pcs)  
standard included with device

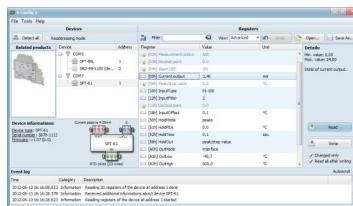


SPH-05  
1 ÷ 5 mm board thickness brackets (2 pcs)



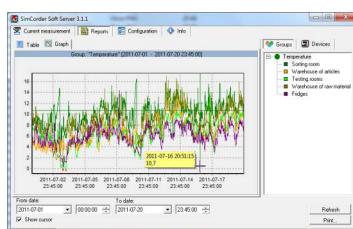
SPH-45  
1 ÷ 45 mm board thickness brackets (2 pcs)

## 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](http://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 converter 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.

