



## SRT-73

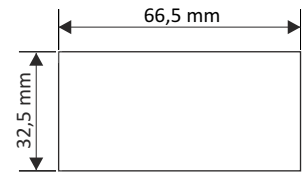
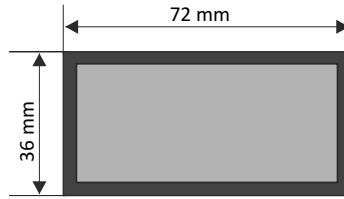
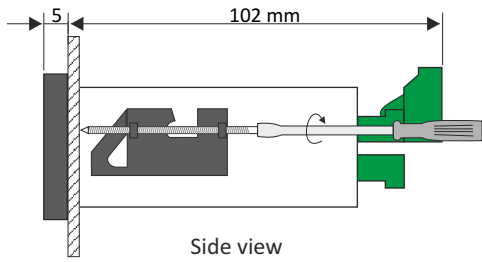
- ❑ temperature meter in a small case
- ❑ two-coloured display (4-digits, IP 40)
- ❑ input: thermoresistance or thermocouple
- ❑ 0, 1 or 2 REL / OC outputs
- ❑ RS-485 / Modbus RTU
- ❑ automatic recognition of 3 and 4-conductor connection (RTD inputs)
- ❑ automatic compensation of TC cold ends temperature
- ❑ 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 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. The meter can be configured with the local keyboard or free S-Config software via the RS-485 communication port.

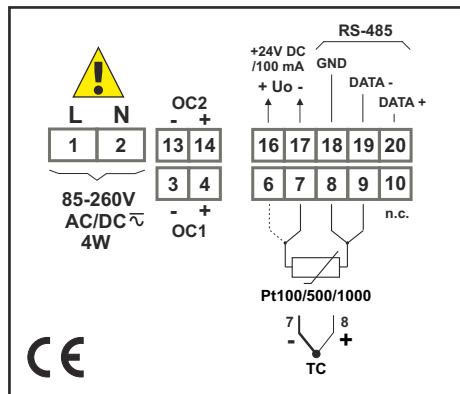
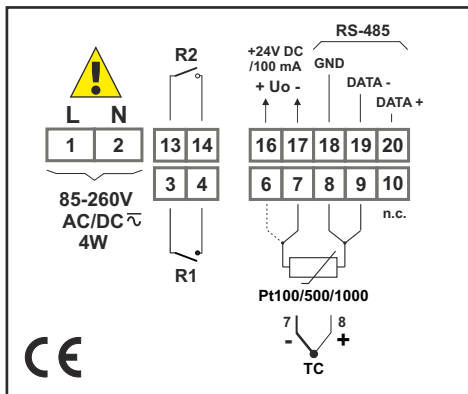
### TECHNICAL DATA

|                         |   |
|-------------------------|---|
| 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                 | standard: LED, two-coloured (red-green), 4 x 13 mm (IP 40); option: LED, red, 5 x 9 mm (IP 67)  |
| 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 Ω at any conductor); measuring range: -100°C ÷ 600°C; resolution: 0,1°C<br><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 REL $I_{max}=1A$ , $U_{max}=30VDC/250VAC$ ( $\cos\phi=1$ ) or OC $I_{max}=30mA$ , $U_{max}=30VDC$ , $P_{max}=100mW$   |
| 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:<br>5 x 9 mm display: IP 65 (front), available additional frame IP 65 for panel cut-out sealing; IP 20 (case and connection clips)<br>4 x 13 mm display: IP 40 (front); IP 20 (case and connection clips)   |
| Case                    | panel mounting; material: NORYL - GFN2S E1  |
| Dimensions              | case (WxHxD): 72 x 36 x 97 mm<br>panel cut-out dimensions: 66,5 x 32,5 mm<br>installation depth: min. 102 mm<br>board thickness: standard 7 mm or other depending on used board thickness brackets (see Accessories)  |
| Weight                  | 162 g max.  |

**DIMENSIONS**



**EXAMPLARY PIN ASSIGNMENTS**



**ORDERING**

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

**type of input:**

- 3 : thermoresistance
- A : thermocouple

**number of outputs:**

- 0
- 1
- 2

**type of outputs:**

- 0 : no output
- 1 : REL
- 2 : OC

**options:**

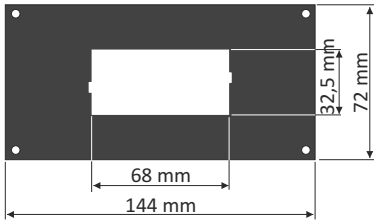
- 00 : no options
- 01 : IP 65 frame
- 08 : operating temp. -20°C ÷ +50°C
- 0P : IP 65 frame + operating temp. -20°C ÷ +50°C

**power supply:**

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

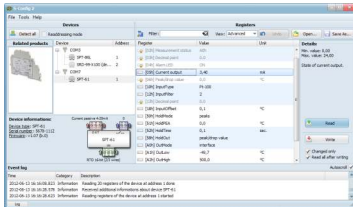


**SPH-05**  
1 ÷ 5 mm board thickness brackets (2 pcs)



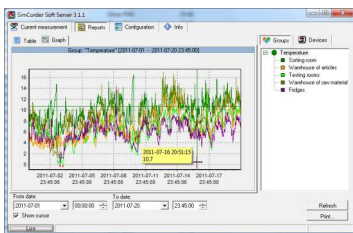
**SPH-45**  
1 ÷ 45 mm board thickness brackets (2 pcs)

## 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.