

## SPT-61

- conversion from temperature to 4-20 mA signal
- USB interface
- automatic recognition of 2- and 3-conductor connection
- DIN rail mounting
- programming with S-Config directly from PC



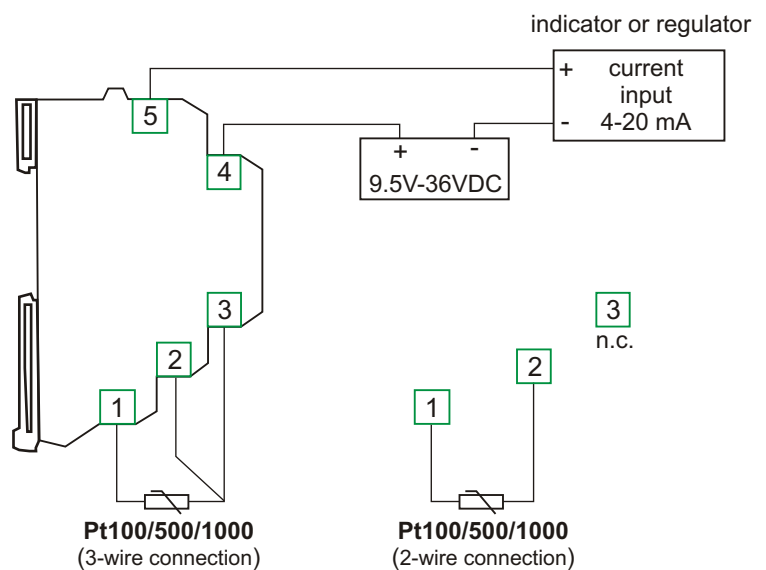
The **SPT-61** module is equipped with Pt 100 / Pt 500 / Pt 1000 type input with automatic recognition of 2- and 3-conductor connection. Due to precision of measurement 3-wire circuit is recommended. The measurement range spans from  $-100^{\circ}\text{C}$  to  $+600^{\circ}\text{C}$ , and input is fully linearised according to PN-EN60751+A2:1999 standard. Module allows conversion from temperature (RTD) to the current value in 4-20 mA standard. Measurement value is transmitted to the current loop output directly after recalculation according to scale selected by user. If input signal exceeds the permissible range, shortcut or break of measurement circuit occurs.

The **SPT-61** module is equipped with peaks detection function. It can detect peaks of the input signal and hold their values.

The device and registers configuration may be done via build in USB 1.1 interface, visible for PC as Virtual Com Port. Transducer parameters can be set by S-Config software. Every unit can be factory pre-configured on request.

- powered directly from current loop,
- full linearisation of the input,
- signal peak value detection,
- alarm diode informing when the measuring range is exceeded,
- programmed with S-Config software,
- very thin DIN housing - 6.1 mm only.

### Wiring diagrams



### Technical data

**Power supply voltage:** 9.5 ... 24 ... 36V DC  
**Current consumption:** 3.4 - 22.1 mA (during normal operation)  
 max. 3.7 mA (during configuration, supplied from USB port)  
**Measurement input:** Pt 100/ Pt 500/ Pt 1000 (2- or 3-wires, automatic connection recognition)  
**Measurement range:**  $-100^{\circ}\text{C}$  to  $+600^{\circ}\text{C}$   
**Measurement accuracy:**  $\pm 0.2^{\circ}\text{C}$  (@  $25^{\circ}\text{C}$ )  
**Temperature coefficient:**  $0.01\% / ^{\circ}\text{C}$   
**Internal resolution:**  $0.1^{\circ}\text{C}$   
**Measurement wires resistance:** max.  $20\ \Omega$   
**Passive current output:** range max.  $3.4 + 24\ \text{mA}$ ,  
 load resistance  $0 \dots (U_s - 9.5\text{V}) / 24\ \text{mA}$  [k $\Omega$ ]  
**Communication interface:** USB (Virtual Communication Port), 8N1 and 8N2, Modbus RTU, not separated  
**Baud rate:** 9600 bit/sek.  
**Data memory:** non-volatile memory, EEPROM type  
**Protection class:** IP 20  
**Operating temperature:**  $0^{\circ}\text{C}$  to  $+50^{\circ}\text{C}$   
**Storage temperature:**  $-10^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$   
**Housing type:** DIN rail mounted (35 mm rail)  
**Housing material:** NORYL UL 94 V-0  
**Housing dimensions:** 80 x 97 x 6.1 mm

### Ordering

**SPT-61-1315-2-1-001**

#### Note:

S-Config software can be downloaded from SIMEX webpage at [www.simex.pl](http://www.simex.pl).