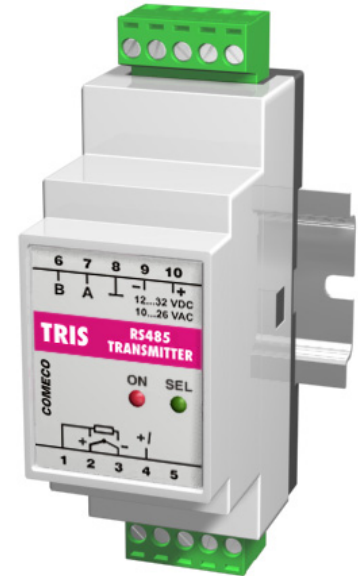


## RS485 SMART DIN-Rail Transmitter TRIS

- ◆ Low-cost network transmitter - up to 32 devices
- ◆ Universal programmable input
- ◆ User-selectable 4 RTD types and 6 thermocouples
- ◆ Accepts linear current and voltage signals
- ◆ Built-in programmable digital filter
- ◆ Convenient programming through RS485
- ◆ Supported protocols: ASCII, ASCII for "PolyMonitor", MODBUS
- ◆ Input / output / supply isolation



TRIS is an intelligent rail-mountable transmitter with universal input and RS485 output, specially designed for multi-point process measurement and data acquisition in a network with up to 32 devices. This transmitter allows the user to:

- select sensor and input signal type (4 RTD types, 6 thermocouples, and 4 linear signals);
- select and adjust input range;
- perform offset correction and device calibration;
- select decimal point position and measurement unit;
- adjust the digital filter.

A network of up to 32 transmitters can be configured and monitored by using the universal COMECO data-acquisition program "PolyMonitor". Thanks to its isolated universal input, networking capabilities, and low price, TRIS is particularly suitable for multi-point data acquisition applications.

### Technical specifications

Input	(programmable)
<b>Pt100 (w=1.385); 3-wire</b>	min. -100...max. 850 °C
<b>Pt1000 (w=1.385); 3-wire</b>	min. -100...max. 600 °C
<b>PTC (1k at 25 °C); 3-wire</b>	min. -50...max. 150 °C
<b>PTC (2k at 25 °C); 3-wire</b>	min. -50...max. 150 °C
<b>RTD minimum range width</b>	50 °C
<b>Thermocouple "T"</b>	min. -40...max. 400 °C
<b>Thermocouple "J"</b>	min. -20...max. 1000 °C
<b>Thermocouple "K"</b>	min. -20...max. 1300 °C
<b>Thermocouple "S"</b>	min. 0...max. 1700 °C
<b>Thermocouple "R"</b>	min. 0...max. 1700 °C
<b>Thermocouple "B"</b>	min. 200...max. 1800 °C
<b>T/C minimum range width</b>	100 °C
<b>Linear current</b>	0(4)...20 mA
<b>Linear voltage</b>	0...100 mV or 0...10 V
<b>Custom linear (option)</b>	on request <sup>(1)</sup>
<b>Offset adjustment</b>	within range limits
<b>Digital low-pass filter</b>	programmable
<b>Digital peak filter</b>	programmable
<b>Isolation</b>	> 1000 VAC for 1 min
Output / Interface	
<b>Interface type</b>	RS485
<b>Function</b>	configuration and networking
<b>Network devices</b>	up to 32
<b>Format</b>	8 (data) + 1 (stop), even parity
<b>Baud rate</b>	1200 / 2400 / 4800 / 9600 bps
<b>Isolation</b>	2500 VAC for 1 min

<sup>(1)</sup> Instead of linear current

<sup>(2)</sup> Ordered separately

### Software <sup>(2)</sup>

<b>Configuration software</b>	"UniConf", free
<b>Monitoring and data acquisition software</b>	"PolyMonitor"
Accuracy	
<b>Measurement error</b>	0.3% from span
<b>Non-linearity</b>	within measurement error
<b>Temperature drift</b>	0.01% from span for 1 °C
<b>Cold junction compensation</b>	automatic software, ± 0.5 °C
Power supply	
<b>Supply voltage</b>	12...24 V
<b>Consumption</b>	max. 100 mA
Indication	
<b>'ON' LED</b>	for power supply ON
<b>'SEL' LED</b>	for active communication
Operating conditions	
<b>Ambient temperature</b>	-20...70 °C
<b>Ambient humidity</b>	0...95 %RH, non-condensing
Design and materials	
<b>Case material</b>	plastic
<b>Wiring</b>	plug-in terminals
<b>Mounting</b>	on 35 mm DIN rail
<b>Dimensions</b>	35x110x58 mm
<b>Weight</b>	90 g
<b>Protection class</b>	IP20

### Ordering code TRIS - G9

Code	Feature or option	Code values
G9	Protocol	A - ASCII, C - ASCII for "PolyMonitor", M,N - MODBUS