ALTHEN
SENSORS & CONTROLS

TSC12-ISO

Measuring device for the acquisition of 12 thermocouples

■ FEATURES

Measuring device for the acquisition of 12 thermocouples

- 12 galvanically isolated inputs
- Sampling rate up to 100Hz
- One 24bit AD converter per channel
- Each channel individually configurable
- Data transmission via USB, CAN, LAN or RS232
- Including software for configuration and logging
- Thermocouple types K, T, J, B, E, N, R, S (opt. mV)

■ DESCRIPTION

The temperature loggers of the TSC series are suitable for simultaneous monitoring of twelve thermocouple temperatures with high requirements regarding accuracy. Thermocouple connection types can be selected individually according to customer specifications, whereby all channels are equipped with the same sensor types.

Optional universal copper sockets can be selected for optimal flexibility, where each channel can be config-ured individually.
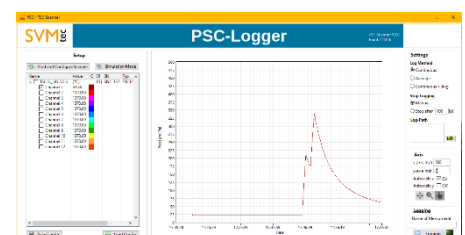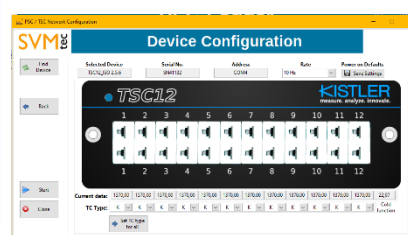
Data transmission is via USB as standard.

The TSC12-ISO series has 12 galvanically isolated inputs, making it possible to measure with thermocou-ples attached to electrically conductive materials.

The conversion of the analog voltages is done by high precision 24bit AD converters with a sampling rate of up to 100Hz.

All common types (K, T, J, B, E, N, R, S) are supported. Depending on the type, temperatures from -270°C to 1820°C can be processed and monitored.

Measurements in the mV range are possible as well.

All TSC12 temperature scanners are optionally available with Ethernet (LAN), RS232 or CAN interface. When transmitting data via a CAN bus, several CAN devices can be cascaded so that test scenarios with a very high number of temperature measuring points can be implemented.

■ TECHNICAL SPECIFICATIONS

Available Thermocouple Sockets			
Typ	**min**	**max**	**Unit**
K	-200	1372	**°C**
J	-210	1200	**°C**
N	-200	1300	**°C**
E	-200	1000	**°C**
T	-200	400	**°C**
R	-50	1768	**°C**
S	-50	1768	**°C**
B	95	1798	**°C**
V*	-140	140	**mV**
Optional: White copper sockets for all types (K, J, N, E, T, R, S, B, V*, W*)			

Accuracy and Sample Rates	
Accuracy	+/- 0.5K (with copper sockets 0.5% FS)
Sample rate per channel	1-100Hz
Resolution (internal)	24-bit

Power Supply	
TSC12	via USB
TSC12-LAN/-CAN	8-24V, 0.5A

Environmental Conditions	
Temperature	5°C...50°C
Humidity	0...95%, non-condensing

Dimensions	
Housing	130 x 55 x 170 mm (B x H x T)

Driver and Software
Virtual COM -Port-Driver
Configuration software
LabVIEW-example program as source code

Supported Operating Systems
Windows 7, 8, 10, 11,Linux

Options
All TSC systems can optionally be equipped with CAN bus, LAN or RS232

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