TST100
1-Wire temperature sensor

Short description

TST100 is 1-Wire temperature sensor.

The temperature sensor integrates a band-gap temperature sensor element plus signals processing and provides a fully calibrated digital output.

The sensor utilizes special flat aluminum head. It allows direct object assembly. The direct assembly ensures low thermal resistance, respectively fast response of the system.

The temperature sensor has 1 meter cable with soldered wires for direct connection to the screw terminals of controller.

Applications

- Server room and data centers temperature monitoring and logging.
- Temperature monitoring of industrial processes.
- Harsh environmental temperature monitoring.
- Temperature monitoring and logging for mobile operator facilities, vineyards, greenhouses, etc.

Technical parameters

Parameter	Value	Units	Remark
Operating Range	–40 to 85	°C	
Accuracy (max)	±0.5	°C	-10 to 85°C
Accuracy (max)	±2.0	°C	-40 to 85°C
Resolution	0.0625	°C	12bit resolution setup
Supply voltage	3 to 5.5	VDC	
Ingress protection	Ip65		
Head's dimensions	8 x 8 x 23 mm		
Cable	1 meter long silicone cable with crimped wires		

Usage

Can be used with following **TERACOM** controllers

- TCW241
- TCW220
- TCW122B-CM
- TCW122B-WD
- TCG120-4

Pinout

Signals	Cable colors	
VDD (+3 to +5.5V)	Yellow	Red
Data	Green	White
GND (Ground)	Brown	Black

Wiring example
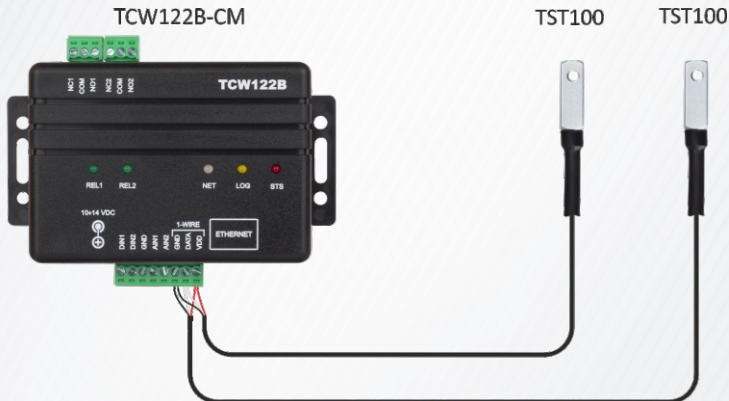
1-Wire Bus

1-Wire is a registered trademark of Maxim Integrated Products, Inc. We strongly recommend read Maxim's 1-Wire tips at https://www.teracomsystems.com/wp-content/uploads/1-wire/guidelines-for-reliable-long-line-1-wire-networks.pdf