

TBOX MS-8RTD

Version 0.92 (preliminary)

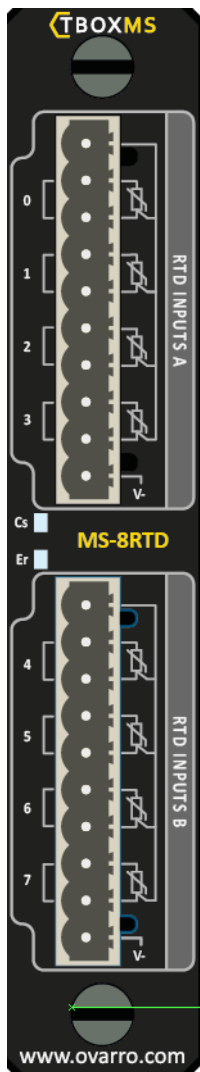
PRELIMINARY

TBOX MS-8RTD

- 8 x temperature inputs
- Sensors supported: Pt100, Pt1000, Ni100, Ni1000
- 2 or 3 wires sensors



Technical Specifications



General

Compatibility

CPU	MS-CPU32-S2
Software	It requires firmware OS >= 1.45.505 .
Hardware	It replaces MS-6RTD but is not compatible. Cabling and application must be adapted.

Consumption

115 mA

Configuration

Hardware	No hardware configuration required
Software	Signal selection during channel configuration

Pt100, Pt1000

Temperature range	-50°C ... +230°C If out of range, value= -273.15°C
Curves	Not available

Ni100, Ni1000

Temperature range	not tested yet
Curves	not available

Scaled resolution

0.1 °C

Accuracy

0.5 % FS @ 25°C

Filter

50Hz and 60Hz rejection

Acquisition

< 1 s for all inputs

Replacement

Hot removable. No risk to damage hardware, but reset is required.

Test

Automatic test of card access by the CPU.

Connector

Screw connector (10 x 5.08 mm)
Wire thickness: 0.14 – 2.5 mm² (or max. 12 AWG)

Isolation

Between channel	Non isolated
Group to Ground/Earth	Global isolation
Level of isolation	1500 V DC

Digital Input - Validity

Validity input (DI)	Returns '0' when temperature is out of range Returns '1' when temperature is within the range
---------------------	--

LED

Cs	Card Selection: card corresponding to card declared in TWinSoft
ER	Error: card type not corresponding to the one declared in TWinSoft

Environment

Temperature storage	-40°C to 85°C
Temperature working (ambient)	Industrial Temperature: -40°C to 70°C
Humidity	5 to 95 % without condensation
Altitude	Max. 5000 m

Dimensions

Without connector	Height x Depth x Width: 150 x 83 x 29 mm (5.906 x 3.27 x 1.142 inches)
Weight	300 g

Approvals

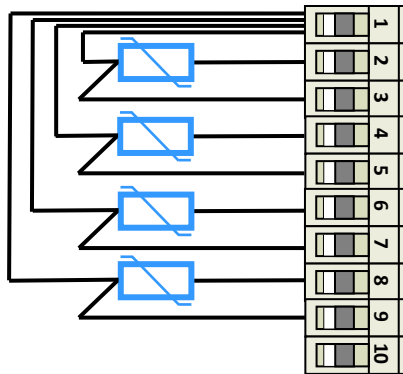
CE

Cabling Schematics

3 Wires Sensors

Connector: **Screw connector**

Pin Out:



Group A

- 1 Common Reference
- 2 Input 0
- 3 Third wire 0
- 4 Input 1
- 5 Third wire 1
- 6 Input 2
- 7 Third wire 2
- 8 Input 3
- 9 Third wire 3
- 10 V- No connection

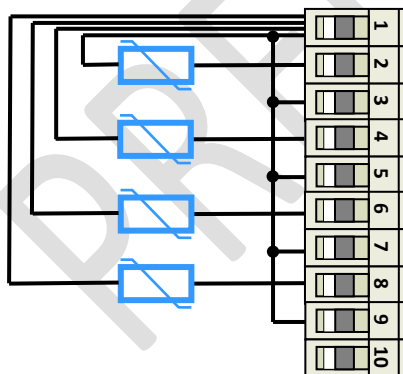
Group B

- 1 Common Reference
- 2 Input 4
- 3 Third wire 4
- 4 Input 5
- 5 Third wire 5
- 6 Input 6
- 7 Third wire 6
- 8 Input 7
- 9 Third wire 7
- 10 V- No connection

2 Wires Sensors

Connector: **Screw connector**

Pin Out:



Group A

- 1 Common Reference
- 2 Input 0
- 3 Third wire 0
- 4 Input 1
- 5 Third wire 1
- 6 Input 2
- 7 Third wire 2
- 8 Input 3
- 9 Third wire 3
- 10 V- No connection

Group B

- 1 Common Reference
- 2 Input 4
- 3 Third wire 4
- 4 Input 5
- 5 Third wire 5
- 6 Input 6
- 7 Third wire 6
- 8 Input 7
- 9 Third wire 7
- 10 V- No connection