



Temperature recording

μCAN.4.ti-BOX

4-channel temperature recording for RTD and thermocouples with CAN interface

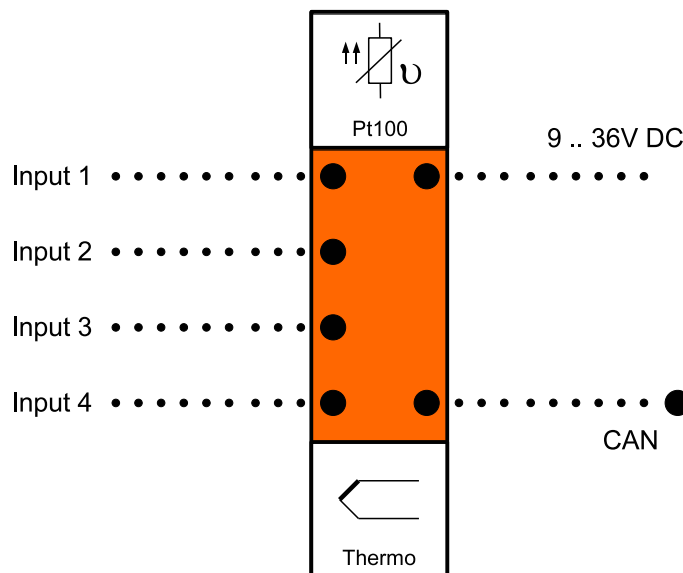
The μCAN.4.ti-BOX is the universal measurement unit for recording temperatures. Resistance sensors and any thermocouple can be polled at a 400Hz total sampling rate.

The sensor signals are evaluated and linearized in a robust die-cast aluminum casing. Data is transmitted to a central evaluation unit via CANbus.



Features

- Temperature recording for Pt100 / Pt1000 measurement probes
- Type J / K / N / T thermocouples, others upon request
- Sensor break and short circuit detection
- Protocol: CANopen CiA 404
- Die-cast aluminum casing in protection class IP66, ideally suited for harsh industrial environments
- Display of the device status and errors by means of 2 bi-color LEDs
- Working ambient temperature -40°C to +85°C



Technical Data	μCAN.4.ti-BOX
Number of channels	4
Power supply voltage	9...36 V DC, reverse voltage protection
Power consumption	2W (84mA @ 24V DC)
Potential isolation	Channel control voltage: 1000V _{eff} , field bus control voltage: 1000V _{eff}
Operating temperature	-40°C...+85°C
Transfer rate	50kBit/sec to 1MBit/sec
Protocol	CANopen CiA 301, CiA 305, CiA 404 / Custom CAN / CAN 2.0A and 2.0B
Number of PDOs	2 transmit PDOs
Configuration	Sensor type via field bus
Baudrate and address	set using DIP-switch / or LSS
Status display	2 bi-color LED for module status information
Protection class	IP66
Housing	Die cast aluminum 125x80x57mm (LxWxH)
Resolution / conversion time	16-bit (internal resolution 18-bit) / total sample rate 400Hz
Measurement range / error @ 23°C ambient temperature	<p>Thermocouple: type J, K, N with cold junction compensation: -200°C to +1,200°C, resolution 0.1 K / accuracy +/- 0.2 K</p> <p>Thermocouple: type T with cold junction compensation: -200°C to +400°C, resolution 0.1 K / accuracy +/- 0.1 K</p> <p>Pt100 / Pt500 / Pt1000: -100°C to +850°C, resolution 0.1 K / accuracy +/- 0.1 K</p> <p>Other signal types upon request</p>
EMC	EN 50082-compliant

Item Number	Designation
12.43.005	μCAN.4.ti-BOX 4-channel thermal data acquisition module with CANopen, signal acquisition of J,K,L,T,Pt100 and Pt1000 type thermocouples , 16-bit resolution, configured for metric cable glands, connection via screw terminals.
90.01.114	Metric cable installation kit for 4-channel field modules.