



# 1-channel thermal data acquisition

## μCAN.1.ti-BOX

### 1- channel thermal data acquisition for thermocouple and Pt100

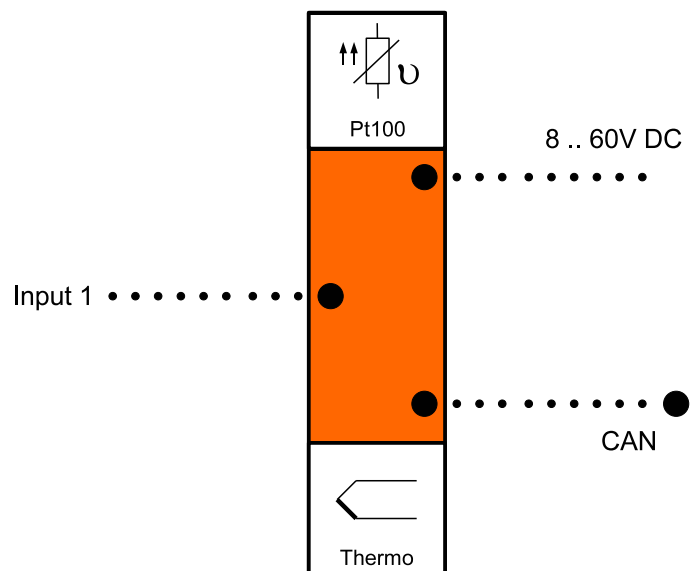
The decentralized data acquisition unit μCAN.1.ti-BOX is configured to acquire temperature signals. The unit is in protection class IP66.

The μCAN.1.ti-BOX is to be installed near the temperature sensor. The sensor signals are processed within the μCAN.1.ti-BOX which transmits the measured temperatures in °C scale via the CAN interface.



### Features

- Acquisition of thermal data with 16-bit resolution
- Pt100 as well as J,K and L type thermal signals
- Wire break and short circuit detection
- Protocol: CANopen CiA 404
- Extended ambient temperature range -40°C...+85°C
- Mechanically shock resistant up to 40 G (optional)
- Vibration resistant from 3 .. 800 Hz @ 4.5 Grms (optional)



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Technical Data	Thermal data acquisition $\mu$ CAN.1.ti-BOX
Number of channels	1
Power supply voltage	8...60 V DC, reverse voltage protection
Power consumption	max. 1 W (42 mA @ 24 V DC)
Potential isolation	channel/control voltage.: 500 Veff, fieldbus / control voltage.:500 Veff
Operating temperature	-40°C...+85°C (others on request)
Transfer rate	10 kBit/sec to 1 MBit/sec
Protocol	CANopen CiA 404 / CAN 2.0A and 2.0B / others on request
Number of PDOs (CANopen)	2 transmit PDOs
Configuration	Sensor type via field bus Bit rate and module address via DIP-switches
Status display	1 bi-colour LED flashing indicator for status information
Protection class	IP 66
Casing	Die-cast aluminium casing 98x64x34mm (LxWxH)
EMC	EN 50082 compliant
Vibration resistance	3...800 Hz @ 4.5Grms (optional)
Shock resistance	mechanically shock resistant up to 40G (optional)
Resolution / conversion time	16-bit / 20 ms
Measurement range / error @23°C ambient temperature	J,K,L type thermal signals with cold junction compensation -200°C...+1,200°C, resolution 0.1 K, accuracy +/- 0.5 K Pt100, -100°C...+850°C, resolution 0.1 K, accuracy +/- 0.1 K  other signal types upon request

Order No.	Description
12.10.009	$\mu$ CAN.1.ti-BOX 1-channel thermal data acquisition module with CANopen, designed for metric cable glands, connection via screw terminals.
12.10.021	$\mu$ CAN.1.ti-BOX 1-channel thermal data acquisition module with CANopen, J type thermo plug-in connector, CAN and power supply through Sub-D 9 poles.
12.10.031	$\mu$ CAN.1.ti-BOX 1-channel thermal data acquisition module with CANopen, K type thermo plug-in connector, CAN and power supply through Sub-D 9 poles.
90.01.113	Metric cable installation kit for 1-channel field modules