

4-channel Temperature Acquisition

μCAN.4.ti-F1 / thermocouple

4-channel temperature acquisition module for thermocouples with CAN interface

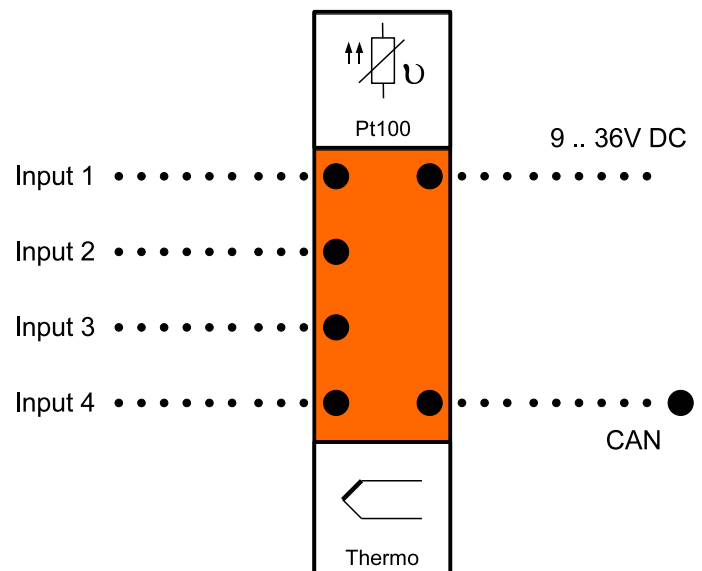
The **μCAN.4.ti-F1 / thermo** is the versatile universal measuring module for analogue standard signals. The module is designed to measure a variety of thermocouple signals at an **overall sample rate of 4 kHz** and is equipped with internal cold-junction compensators for each channel.

Sensor signals are linearized and evaluated within the robust aluminium die-cast casing. Data is transmitted to a central evaluation unit via CAN bus.



Features

- 4 analogue inputs for thermocouples, internal cold-junction compensation
- sample rate max. 1 kHz per input
- operating temperature -40°C...+85°C
- CAN 2.0A and CAN 2.0B / RawCAN
- free software configuration tool
- aluminium casing in IP65
- indication of device status via 1 bi-color LED



| Technical Data | Analogue acquisition μCAN.4.ti-F1 / thermocouple |
|--|--|
| Channels | 4 |
| Power Supply | 9...36 V DC, reverse polarity protected |
| Power Consumption | 2W (84mA @ 24V DC) |
| Isolation | Channels/Supply: 500Veff, Fieldbus/Supply: 500Veff |
| Operating Temperature | -40°C...+85°C |
| Bitrate | 20kBit/sec ... 1MBit/sec |
| Protocol | RawCAN / CAN 2.0A and 2.0B |
| Configuration | free software configuration tool |
| Status Indication | 1 bi-colour LED |
| Protection Class | IP65 |
| Casing | Aluminium, powder-coated 120x110x48mm (LxWxD) |
| EMC | according to EN 50082 |
| Signal type / Accuracy @ 23°C ambient temperature | thermal signals type K,J,L,R,S,T with internal cold-junction compensation: -200°C...+1.200°C, resolution 0.01K / accuracy +/- 0.2K |
| Sample Rates [Hz] | 2 ... 3750 |
| Resolution | 2Hz / 24-bit 3Hz / 18-bit |
| Filter | Software filter / moving average determination, adjustable |
| Configuration Analogue Inputs | SYNC driven sending ADC-Interrupt driven sending Timer driven sending |

| Order Number | Description |
|---------------------|--|
| 17.40.005 | μ CAN.4.ti-F1 / Thermo K 4-channel temperature acquisition, signal type thermocouple type K, sensor connection via thermo plug-in connector mini style (code green), connection Power/CAN via Lemo connector B series, includes 2 connection elements |
| 90.15.000 | Foot / connecting element for F1 modules |
| 90.15.001 | F1/F1 connector (CAN + Power) length 140mm, with Lemo connector at both ends |
| 90.15.200 | F1 terminal resistor for CANbus with Lemo connector |
| 90.15.150 | F1 connection cable (CAN + Power) length 2m, with Lemo / SUB-D connector 9-pin, open end for Power |
| 90.15.100 | F1 connection cable (CAN + Power) length 2m, Lemo connector / open end |
| 90.15.300 | Sensor connector, Lemo K series FGG.0K.306.CLAC50, 6-pin, solder contacts, water-tight |
| 90.15.350 | Power+CAN connector, Lemo F series FGN.0F.305.XLC, 5-pin, solder contacts, water-tight |