CANmod.temp

4 x Thermocouple-to-CAN [Temperature Sensor]

PLUG & PLAY: Standalone - no PC required. Integrate with any CAN to add temperature data. DBC included

PRECISE: High accuracy with cold-junction compensation & line frequency filtering. Fault detection

COMPACT: Only 7 x 2 x 5 CM. 80G. Alu enclosure. 3 LEDs. 5-26 V DC via DB9. USB for config/FW/stream

USE ANY TYPE: Configure each thermocouple channel type (B, E, J, K, N, R, S, T)

4x THERMOCOUPLES: Output data from 4 thermocouples at 5 Hz. High signal resolution of 0.01 degC

CONFIGURABLE: Configure CAN IDs, bit rate, message frequencies and more via JSON config and GUI

This thermocouple-to-CAN module produces temperature data from 4 thermocouple sensors and outputs it via CAN bus (standalone) or USB.

The module supports all thermocouple types (B, E, J, K, N, R, S, T) and can be easily daisy-chained.

You can integrate the module with any CAN bus system - e.g. to provide temperature data for your ECUs or existing CAN hardware.

As an example, you can use the module as an add-on for the CANedge - ideal for e.g. engine dynos, EGT analysis or temperature telematics.

Probes not included.

Add temperature data to any CAN bus

Add temperature sensor data via 4 thermocouples to your CAN bus - e.g. for use by ECUs or CAN hardware.

- Compatible with any high speed CAN bus (2.0A, 2.0B)
- Fully configure CAN IDs, bit rate and message frequency
- Daisy-chain multiple modules for 8, 12, 16, ... channels
- Power at 5-26 V DC via standard DB9 adapter cables
- Optionally record data via any CAN interface/logger/...
- Ex: Use as add-on for the CANedge (power via 2nd port)
- DBC included for decoding to human-readable form
- Optionally stream sensor data via USB in real-time
- White label e.g. for inclusion in your production
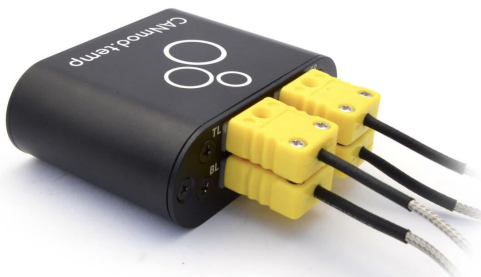
Example: Log/stream sensor data

The CANmod.temp is often used as an 'add-on' for the CANedge. This setup lets you record e.g. vehicle data via Channel 1 and temperature data via Channel 2. The data can be easily DBC decoded via e.g. the asammdf GUI, Python or MATLAB.

You can also stream the sensor data in real-time via USB using SavvyCAN to view raw/decoded data (e.g. via plots) - ideal for validating your setup pre-deployment or for lab testing.

Technical specs

GENERAL

Safety	CE, FCC, IC certified
Functionality	Supports 4 x thermocouples for outputting temperature data via CAN and/or USB
Warranty	1-year warranty
Support	Free, fast & high quality support
Origin	Denmark
Software	100% free & open source
Documentation	**Online/PDF** documentation

CAN BUS

Channels	1 x CAN/CAN FD
CAN IDs	Fully configurable (CAN 2.0A/2.0B)
Bit-rate	Fully configurable (up to 1 Mbit/s)

SENSOR TEMPERATURE

Module	Pro specs MAX31856MUD+
Channels	4 thermocouple sensors/channels
Temperature	Supports -210°C to +1800°C
Formatting	DegC via automated edge linearization
Accuracy	Lab-grade with cold junction compensation
Resolution	Up to 0.01 degC resolution
Other	Line frequency filtering, fault detection, overvoltage protection

SIGNALS

CAN Signals	Probe temperatures in degC [5 Hz] Ambient temperature [5 Hz] Faults: Status of each sensor [5 Hz]

MECHANICAL/SUPPLY

Connectors	1 x DB9 (adapter cables available)
Input supply	+5V to +26V DC via DB9 (pin 1 or 9)
Consumption	<1W
Dimensions	52.5 x 70.0 x 24.5 mm (L x W x H)
Weight	70 G
LEDs	3 external LEDs (PWR, CAN, MEM)
Temperature	-25 degC to +70 degC
IP rating	IP40