



Quickstart Guide TCCXX

(4-10x Thermocouple Converter to Can Bus)

Provided accessories

- Thermocouple Converter with housing
- DTM plug with wedge lock
- 4 pins for self crimping

More information

More information on our products and accessories you can find online at:

www.canchecked.de/tccxx/

The TCCXX module allows you to connect up to ten ungrounded type-K thermocouples via CAN bus. Thermocouples of this type are suitable for various applications such as measuring exhaust gas temperature (EGT), temperatures before/after the intercooler, cylinder head temperatures, water temperature, oil temperature and more. All measurements are cold junction compensated with a range from 0 to 1250°C (32 to 2282°F) in 0.25°C resolution (14bit). The module is equipped with a four-pin DTM connector for CAN/power and miniature K-sockets. The module supports the CAN 2.0A/B standard with flexible configuration, making it compatible with many devices from other manufacturers. You can configure and update your module as well as query the current temperature and thermocouple status via the activatable Wi-Fi.

Features:

- Available in 4, 6, 8 and 10-way versions with cold junction compensated type-K inputs.
- Can Bus connection (flexible Can Identifier or predefined protocols)
- Measuring range from 0 to 1250°C (32 to 2282°F) with 0.25°C resolution
- Detection of short circuit to ground or if no type-K is connected
- Standard mini thermocouple connector
- Full Wi-Fi configuration
- Adjustable transmit frequency (5/10/20/50/100/200/250/500 Hz)

Stecker: DTM06-4S

Crimp: TE 1062-20-0122

- 1) Ground
- 2) 12V
- 3) Can Low
- 4) Can High

Installation

Mount the TCCXX in a dry and not too hot place in your vehicle (for example behind the firewall). You can use the two M6 screw points, or the cable tie straps for this. The power supply can be taken from our CBD08 (Can Hub) or separately with a 2A fused connection via ignition plus (terminal 15). Plug the thermocouples directly into the TCCXX. Pay attention to the correct polarity.

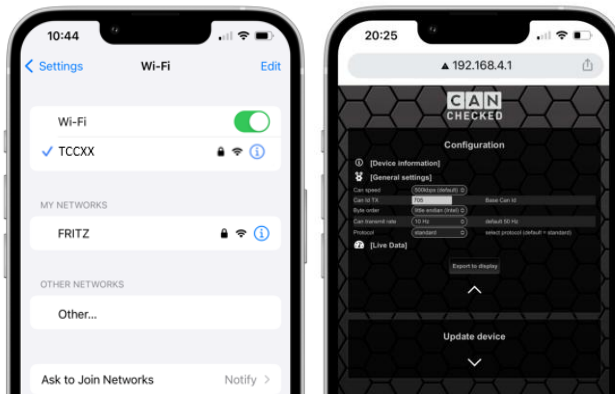
Setup

To set up your TCCXX, use either your smartphone or a laptop/PC. Once the TCCXX is connected to the power supply, switch on the ignition once and wait until the status LED on the side shows green. Now immediately switch the ignition off again so that the LED goes out and then switch it on again directly. The LED now flashes blue. You now have 2 minutes to connect

to the Wi-Fi. otherwise, the Wi-Fi connection is deactivated again and the LED lights up green again. Use the two QR codes one after the other to connect:



The first QR code adds your Wi-fi hotspot (alternatively you can find it as "TCCXX" and the password is **12345678**). As soon as you are connected to the Wi-Fi, the LED flashes blue/green. The second one leads you to the oDSS (Online DSS) on **192.168.4.1** Once you have accessed this page, the LED lights up blue continuously.



LED status:

- green:* can bus data receive
- green flashing:* no can bus data receive
- blue flashing:* waiting for Wi-Fi connection
- blue-green flashing:* waiting for oDSS
- purple:* device boots up

Under "General settings" you set the desired transmission data: Can speed, Can ID and byte order. By default, it is 500kBit/s, ID 0x705 and little endian.

The TCCXX supports different Can Bus protocols:

- 1) Standard (adjustable speed, Can ID and byte order); 0,25°C resolution
- 2) Standard (adjustable speed, Can ID and byte order); 0,1°C resolution
- 3) Ecumaster EGT2CAN Emu Classic
- 4) Ecumaster EGT2CAN Emu Black
- 5) Haltech TC8
- 6) Haltech TC8+TC2A
- 7) Motec E888 Box 1-4 (0xF0, 0xF4, 0xF8 or 0xFC)
- 8) AEMnet 11bit (0x5A0)
- 9) FuelTech (8A+4A, 8B, 4A or 4C)

Under "Live Data" you can see the temperature and the status of the thermocouples. You can download updates from our website in the "Help" area and transfer them directly to the device via Wi-Fi using "Update device".

On questions regarding accessories or functionality please get in contact with us by opening a ticket on www.canchecked.de