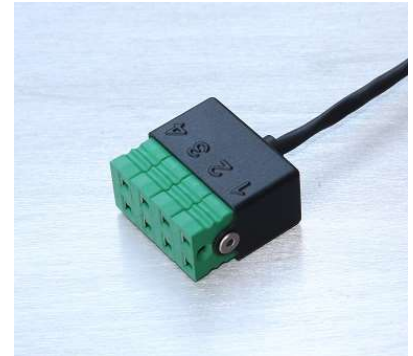


4IN TCK

Four TCK input to CAN bus module



Electrics:

Supply voltage: 5.5V to 16V (can be powered with 5V for setting the device)
 Supply current: 15mA
 ADC resolution: 12bits
 Input lowpass filter: 160Hz (-3db)
 Measure range: -40°C to 1300°C
 Accuracy: +/-1%
 Measurement resolution: 0,4°
 Theoretical precision: +/-1%

Supply,CAN	
Power Supply	Purple
GND	Black
CAN H	White
CAN L	Blue

Mechanics:

Size: 34x18x32mm without cables
 Cables: KU 22AWG
 Wiring sleeve: DR-25
 Device enclosure: PA
 Protection: IP67 (filled with epoxy resin)
 Operating temp.: -20 to 80°C
 Weight: 30g

Functionalities

CAN: 2.0A and 2.0B
 Termination: Open
 CAN baudrate: User settable (1M, 500k, 250k, 125k)
 IDs: One message ID for each input, user settable.
 (!!! Extended IDs 0x00000010 and 0x00000011 are reserved)
 Format: Big or Little endian (user settable)
 Messages Rate: Individually and user settable up to 1kHz
 Messages content: Temperature in 3 different scales (°K,°C,°F) less in "All In One" mode.

- Miscellaneous:
- Configuration through Lawicel USB/CAN tool and free specific software.
 - Firmware upgradable



Lawicel USB/CAN tool



Installation

FTDI drivers must be installed before connect the USBCAN tool from Lawicel. Use administrator mode for this installation.
Then, install the Thq4IN software running setup.exe.

A subd9 adaptor is supply with this tool. Find right wiring details:

Note that only Lawicel USBCAN tool supply by **THQtronic** have power supply present on pin 9 and must powered **ONLY THQtronic** devices. Temperatures measurement can't be down when device is supplied by USBCAN tool due to internal Vref unaccurate in this situation.

Sig.	color	Subd pin
5V (from USB)	Red	9
GND	Black	3
CAN H	White	7
CAN L	Blue	2

Software description

CAN bus

Select the CAN bus speed of your system where you will use 4IN modules. Default factory speed is 1Mb.
Choose word format sent (Little or Big Endian).
Choose recursion type of messages

- Fixe recursion: message will be sent each period set
- Minimum recursion: message will be sent when value is changed but with minimum time set (in ms) or at least each second.

Sensor

ID:

For each channel, an identifier can be set. In "All In One" mode, first input ID is the only one considered.

Message:

Normal mode

Word1	Word2	Word3	Word4
Temperature Kelvin scale	Temperature Celsius scale	Temperature Fahrenheit scale	Amplifier output (mV)

"All In One" mode

Word1	Word2	Word3	Word4
Temperature In 1 in Kelvin	Temperature In 2 in Kelvin	Temperature In 3 in Kelvin	Temperature In 4 in Kelvin

Recursion emission:

Choose message recursion in millisecond. Set to "0" for disable message.
Recursion mode setting (fixed or minimum recursion) is also available and is for all channels.

Important note:

No insulated thermocouple can be use if it is connected in +/-2.5V range regard device ground.
Remember that extended IDs 0x00000010 and 0x00000011 are not allowed on the CANbus where 4IN are used.