

# Influx

## K-TC 8,16,32

## K-TC 2.0 Range

### Measuring Temperature

**Stackable fast, accurate and reliable temperature measurement.**

The K-TC 2.0 modules belong to the Influx K-series instrumentation range for CAN applications.

The stackable K-TC 2.0 is ideal for those applications that require a large number of thermocouples, for example vehicle durability, winter and summer testing.

The K-TC 2.0 modules CAN Bus settings, calibration and sampling rates are all easily configurable and stored in the K-TC 2.0 module even when not powered.

The input calibration and set-up of the K-TC 2.0 module is easily configurable via Influx K-Cal software, a freely distributable Windows pc application.

Logs and stores data to an integrated memory card, independently (without the support of any other data logger).



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### Key Features

- Each K-TC 2.0 unit has up to 8, 16 or 32 thermocouple connections at 20Hz sampling rate
- Supports K, J and T type thermocouples
- Simple signal configuration using a DBC file
- Supports logging of timestamped temperature data inside an integrated eMMC (8GB)
- Supplied with configuration software Influx K-Cal for Windows® and configurable via a DBC file
- Device drivers available for Windows® applications (32/64-bit)
- Configuration and programming via CAN or USB interface
- WakeOnCAN enables K-TC 2.0 modules to power up and power down in deep sleep mode
- Measurement accuracy:  $\pm 1$  degree C, Measurement resolution: 0.0001 degree C
- Instrumentation data time synchronised with recorded vehicle network data via CAN
- Galvanic isolation (USB, CAN, Power, and TC Boards)
- Free TC Logger software provided to manage the data logging functions
- Stackable ABS enclosure



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## Technical Data

Technical Data	Description		
Power supply	4.5V to 31V DC (isolated)		
<b>Power consumption</b>			
	K-TC8	K-TC16	K-TC32
Normal operation	120mA at 12V	140mA at 12V	200mA at 12V
Power down standby mode	24mA at 12V	25mA at 12V	30mA at 12V
Configuration	via CAN bus with K-Cal for calibration. Via USB with TC Logger SW for logging. configurations stored in the device		
Interfaces (Isolated)	CAN bus (max 1000 kbps) and USB 2.0		
Storage	8 GB eMMC		
PC Interfaces	USB2.0 Type B (isolated)		
Enclosure	Dimension (LxHxW): 115x56(K-TC8), 79(K-TC16), 149(K-TC32) x 105mm		
	Weight 450g(K-TC8), 570g(K-TC16), 900g(K-TC32)		
	IP 40		
Environmental	ABS/Aluminum Allow* (depending upon the stock availability)		
	-40°C to +85°C		
	Humidity max 90%		
Thermocouple Inputs	K, J, T-type		
	Accuracy ± 1°C		
	Measurement: -200 °C to 1250 °C		
Connection type	Thermocouples: mini K, J, T-Type (galvanically connected)		
<b>Thermocouple Inputs</b>			
Number of channels	K-TC8: 8 channels, K-TC16: 16 channels, K-TC32: 32 channels (group of 8 isolated/ each galvanically connected)		
Channel Input Types	K, J, T		
Measurement Range	-200°C to +1200°C		
Max Sampling Rate	20 Hz per channel		
Max applied voltage	± 3.3 V		
<b>Peak Galvanic Isolation Voltage (from all other modules and power supplies)</b>			
Three-wire CAN Bus	780 V		
Four-wire USB Bus	840 V		
Two-wire power module	560V		