

# Influx

K-AN8



Analogue Modules





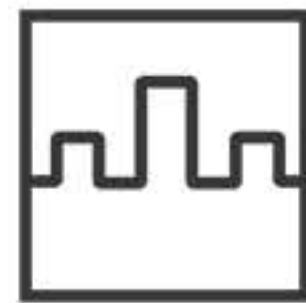
P/N: INF2210



•CAN Output



•Voltages



•Digital signals



•Digital Analog

## Advantages

- Combined Voltage, and PWM/Digital measurements.
- Software switchable voltage input ranges from  $\pm 80V$  to  $\pm 0V$ .
- Very high accuracy- Analogue  $\pm 0.0015\%$  in theory,
- High input impedance on analogue inputs.
- WakeOnCAN and power down deep sleep mode.

## K-AN8 -Analogue Modules

### Combined Voltages, Currents and PWM signals

Accurate analogue and digital sensor measurement data for CAN applications.

The stackable **K-AN8** is our cost effective solution to measuring analogue and digital/PWM sensors together in one module. Extremely easy to use and stackable with all of our other K-series instrumentation modules.

The **K-AN8** includes our unique power down and WakeOnCAN feature for quick installation on long term unattended fleet test vehicles.

Accurate sensor measurement data is transmitted periodically on the CAN Bus enabling multiple K-Series modules to be connected together.

The **K-AN8** CAN Bus settings, calibration and sampling rates are all configurable and stored even when not powered.

## Key features

- 8 Analogue inputs with variable input sampling rates. (8 channels at 1k Hz, 2 channels at 10k Hz)
- PWM: 3 inputs frequency measurements, counters or pulse measurements.
- Outputs: 4 Relay outputs. (Optional)
- Regulated +5V and +24V output power supply for external sensors.
- Supplied with configuration software, Influx K-Cal for Windows® and configurable via a DBC file.
- Instrumentation data time synchronised with recorded vehicle network data via CAN.
- Galvanic isolation between modules (enclosure; power supply & CAN bus & digital channels; analogue channels ).
- Analogue channel over-voltage protection  $\pm 150$  Volt.
- Stackable ABS enclosure.



Function	Description
Power supply	6V to 36V DC
Interfaces	CAN Bus
PC interfaces	None (CAN interface hardware required.)
Enclosure	Dimension (L115xH26xW105) unit: mm Weight 320g IP65 ABS
Environmental	-40degC to +85degC Work temperature; Humidity max 90%
Output Voltages	5V sensor supply max current 75mAmp (total power < 1.8W)
	24V sensor supply max current 75mAmp (total power < 1.8W)
	<b>Analogue Inputs</b>
Number of channels	8 Bipolar differential inputs
Accuracy	± 0.0015%
Software switchable Range	± 80V, ± 40V, ± 20V, ± 10V
Resolution (ADC)	16 Bit
Max Sampling Rate	1 kHz@ all 8 channels, *2 kHz@8 channels, 5kHz@4 channels, 10kHz@ 2 channel
Input Impedance	> 4 M Ohm
Max input voltage	± 75 V vs Analog Ground; ± 150 V between Analog inputs

\*For higher sampling rate of Analogue Inputs than 1 kHz, digital, thermocouple and other analogue channels need to be switched off due to CAN bus bandwidth limitation.



Function	Digital Input / Output
Number of channels	4 unipolar single-ended configured as inputs or outputs
Input Switching Thresholds	Low < 1.5V
	Height > 2.0V (up to 12V)
Input leakage current	< 10nA
Output States	(Optional) Open collector & 510 Ohm
Output Drive Capability (OK): Collector-emitter voltage	45V max
Collector current (DC)	10mA max
Saturation voltage (OK on)	< 0.15V
Equivalent on-resistance	< 510Ohm
Leakage Current at OK off	< 5uA
Min-Max Applied Voltage	Digital input -8V to +12V; digital output 0V to +40V power supply, limits to 10mA
PWM	3 digital inputs frequency measurements up to 100kHz or pulse measurements. (min 100 Nano seconds, min time between pulses 10 microseconds)





## K-AN8 Kit



1x Influx Technology K-AN8



1x Influx Technology K-Bob



1x Kvaser™ Leaf Light



1x Kvaser™ T-Connector



1 x 9 Way-9 Way Cable



1x 25-Way D-Sub terminal



1x 120 Ohm CAN Bus termination D-Sub



1x Influx carry case

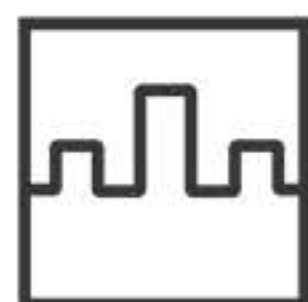
P/N: INF2211



•CAN Output



•Voltages



•Digital Signals



•Digital Analog

This K-AN8 (8 analogue + 4 digital input) kit contains everything needed to get the K-AN8 set up and tested on a work bench.

To help with connecting sensors to the analogue and digital ports the K-BoB enables easy connection with BNC connectors. Influx K-Cal is easily connected via the Kvaser LeafLight interface and Kvaser T-CANnector. (Using the Kvaser T-CANnector to power up the K-AN8 (at the desk) and terminate the CAN bus) This kit is supplied in the Influx carry case.

**Highly Recommended if new K-AN8 user – very easy to setup and test on a work bench. For example when calibrating.**

Our K-AN8 Kit is a cost effective solution to measure multiple sensor types within one module. Extremely easy to use and ideal for applications that will measure inputs such as pressures, voltages, currents (using a current clamp), PWM, RPM, digital counters or IEPE sensors.

Multiple K-Series modules can be stacked, connected and configured to work together. All K-Series instrumentation modules allow the measurement of signals and the periodic transmission of sensor measurement data on a CAN 2.0 network.

## Typical Applications

- Vehicle testing with additional instrumentation requiring a wide range of sensors. For example, voltage, pressure, fuel flow, RPM, event counters, acceleration etc.).
- Competitor bench testing (reverse engineering). Instrumentation combined with vehicle CAN data. (Collected via our Rebel data loggers).
- Vehicle engineering component testing. (Using K-series add on modules for IEPE, PT100/PT1000 sensors)



**Influx Technology Ltd**



[sales@influxtechnology.com](mailto:sales@influxtechnology.com)

[www.influxtechnology.com](http://www.influxtechnology.com)



## K-Series Instrumentation Solution

Price and specification are correct at date of publication but subject to availability or change without notice. Photos for illustrative purposes only - actual items may differ from photo. Influx Technology Ltd cannot be responsible for errors in typography or photography.

All copyrights reserved @2021



**Influx**  
TECHNOLOGY