

Signal Converter AD 8/4

Compact Measuring Module

Type SAD84A

For converting signals (analog/digital) and frequencies to CAN messages.

- 8 analog inputs with a resolution of 16 bit in the range of ± 10 V
- 4 counter inputs including the measuring modes frequency, sum, consumption, speed, distance, revolution
- 1 sensor connector for direct connection of Correvit® sensors
- Galvanic separated power supply of the input connectors for direct supply of all connected sensors
- Adjustable sampling rate of 10 ... 1 250 Hz
- Individual CAN bus configuration



Description

The Signal Converter AD 8/4 is an easy-to-use device for conversion of analog and digital signals to CAN messages. It may be connected to any data acquisition via CAN bus. It is equipped with 8 analog inputs with an input voltage range of $-10 \dots 10$ V.

The module converts the input signals to the required units. There is an option to enter factor, offset, unit and to set a filtering per channel. 4 counter inputs enable acquisition of frequencies like wheel rotation or the consumption of a connected fuel flow meter. Additionally, you may select an individual measuring mode for each channel. The following modes are available: frequency measurement, sum, consumption, speed, distance, and revolution.

A sensor connector enables direct connection of Correvit or Microstar sensors to the measuring module. Here, you may also select factor and filter time to calculate the measurands distance and speed. Additional sensors like, for example, accelerometers, angular rate sensors, distance sensor, wire potentiometers, and temperature sensors may be connected.

The rear side of the module is equipped with a connector for use with Kistler data loggers (i.e. Type CGPSLA and CLOGMA) providing direct power supply to the module as well as direct measurement data transfer via CAN bus.

Application

The Signal Converter AD 8/4 is suited for use with Kistler loggers or any CAN data acquisition for measurements in the field of vehicle dynamics testing. Typical applications are brake tests, acceleration tests, and consumption tests.

Technical Data

Performance Specifications

Power supply	V	10 ... 28
Power consumption at 12 V	W	12
Power consumption for analog channels	V	+5/+12
Power consumption for counter channels	V	+5/+12
Current limitation		
Sum of all channels +5 V	A	1
Sum of all channels +12 V	A	2,5
Temperature range		
Operation	°C	-20 ... 50
Storage	°C	-20 ... 70
Degree of protection		IP30
Dimensions LxWxH (approx)	mm	300x230x150
Weight	grams	1 250

Channels

Input channels for Correvit sensors	number	1/TTL
2 signals (distance/speed)		
Counter channels	number	4
Frequency limit (max.)	kHz	100
Level		TTL
Overvoltage (max.)	V	24
Analog channels	number	8
Resolution	bit	16
Input voltage range	V	-10 ... 10
Overvoltage max.	V	24
Sampling rate per channel (max.)	Hz	1 250

Interfaces

CAN (Motorola/Intel)		2.0B
USB (Full Speed) ¹⁾		2.0

¹⁾ only for configuration

Page 1/2

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Dimensions

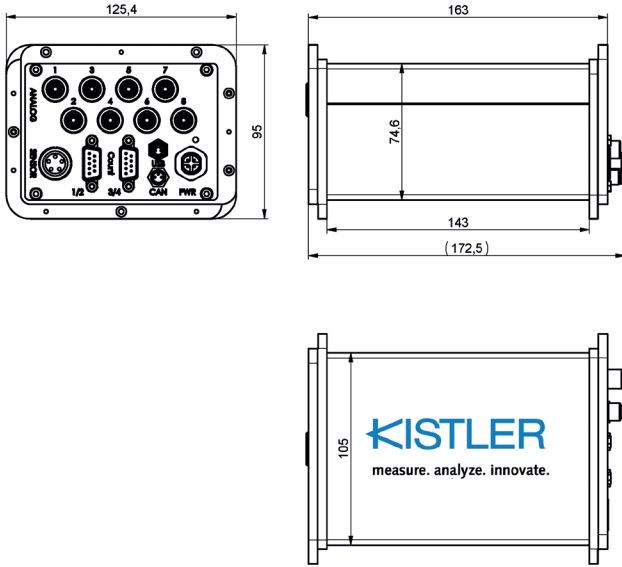


Fig. 1: Signal Converter AD 8/4 dimensions

Included Accessories

	Type/Art. No.
• Measuring module Signal Converter AD 8/4	55091274
• Power cable, B-coded, 4 pin, l = 2 m	18012367
• Connecting cable USB, 4 pin, l = 2 m	18012483
• Connecting cable DAS-3, l = 0,2 m	18012579
• Connecting cable CAN, 3 pin, l = 2 m	18012482
• Distribution cable TTL input, 9 pin, l = 1 m	18012381
• Signal cable sensor/electronics, l = 2 m	55065238
• BNC adapter, 6 pin Lemo, 2x	22000262
• Screw set	55123001
• Transport case, complete	55066882

Optional Accessories

	Type/Art. No.
• Fastening bracket	55066763

Ordering Code

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