

CW-327

A/D-CONVERTER



We have expanded our CW-300 series for test bench technology with the CW-327, a module designed to measure 16 analog voltages. It is possible to measure voltages from 0 to max. 60 VDC per channel with a 16 bit resolution. Device settings such as baud rate of the CAN bus, output transfer rate, voltage ranges and transmission modes can easily be configured via CAN messages. All 16 inputs are sampled synchronously and issued on the CAN bus.

Consequently, the CW-327 is particularly suited for performing component tests and simulations on HiL test benches. Furthermore, it is practical to use this module in all other situations in which voltages are to be measured in close proximity to the test specimen. The close proximity to the test specimen makes it possible to reduce cabling costs and susceptibility to EMI noise.

In conjunction with the bus technology modules CW-101 and CW-102 it is possible to transfer measurement data via USB or ethernet to a PC on the one hand, and to alter the configuration of the module on the other (communication is based on CAN-messages and can be performed with any CAN-interface). A software API written in C/C++ and C# facilitates incorporating the module in proprietary programs.

PERFORMANCE CHARACTERISTICS

- 16 single-ended inputs or 8 differential inputs
- Input voltages configurable between 0-60 VDC
- 16 bit resolution per channel
- Analog anti-aliasing filter
- Measurement data output via CAN bus
- Synchronous sampling of all channels
- Overvoltage, polarity reverse and short-circuit protection
- Easy to extend and scale channels

VOLTAGE INPUTS

Number	16 channel single-ended or 8 channels differential
Voltage ranges	0 VDC to 60 VDC (max.) Further measurement ranges hardware configurable
Sampling rate	125 kHz
Resolution	16 bit per channel
Deviation	2 % to measuring range end value
Output rate	500 Hz (default), max. 1 kHz via CAN-Bus configurable, Higher output rates on request

CAN-INTERFACE

Number	1
Type	ISO 11898-2 (highspeed) CAN-protocol version 2.0 A and 2.0 B, supports SAE J1939 (29-bit identifier)
Data rate	500 kbit/s, on request: 50, 100, 125, 250, 500, 800 and 1000 kbit/s
Termination	120 Ohm, optional activation via jumper

POWER SUPPLY

Supply voltage	7 VDC to 30 VDC
Current consumption	100 mA at 12 VDC

ENVIRONMENTAL CONDITIONS

Temperature range operation	-20 °C to +65 °C
Temperature range storage	-20 °C to +85 °C
Relative humidity	35 % to 85 %, non-condensing

GENERAL INFORMATION

Housing	45 mm-DIN-top-hat rail housing
Dimensions (LxWxH)	100 mm x 125 mm x 55 mm
Weight	180 g

FURTHER DEVICES CW-300 SERIES

CW-301 CAN controlled Power Supply	CW-325 Bus and Signal multiplexer
CW-311 Wheel Speed Unit Simulation	CW-326 Failure Injection Unit
CW-312 PS15 Sensor Simulation	CW-328 Current Measurement Interface
CW-321 Power Relay-Interface	CW-329 Relay Control
CW-322 20-Fold Signal Relay-Interface	CW-390 High Load Relay up to 35 A
CW-323 D/A-Converter	CW-391 High Load Relay up to 70 A
CW-324 Current Sink	CW-392 High Load Relay with integrated current measurement