# CW-328

# CURRENT MEASUREMENT INTERFACE



Utilizing the CW-328 it is possible to quickly and easily measure currents with very little effort. The addition to the CW-300 series from CANWAY is designed for test bench and other applications.

The current measurement interface provides 8 channels with which it is possible to measure currents from -5.8 A to +5.8 A. The measured data can be output via CAN bus and by means of an analog voltage signal. The maximum output transfer rate via CAN bus is 2 ms. Setting options, such as cycle time, CAN message ID and baud rate can be set via the CAN protocol.

The CW-328 is particularly suited for performing component tests and simulations on HiL test benches. Furthermore, it is practical to deploy this module in all other situations in which currents are to be measured in close proximity to the test specimen. This reduces costs for cabling as well as 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 CHRACTERISTICS

- 8 measurement channels
- Current measurement up to ± 5.8 A
- 10 mA resolution per channel
- Measurement data output via CAN bus
- 8 analog voltage outputs proportional to the measured current values
- Top-hat rail housing for quick and easy installation
- Easy to extend and scale



## **CURRENT MEASUREMENT CHANNELS**

| Number              | 8  |
|---------------------|--|
| Measurement range   | -5,8 A to +5,8 A   |
| Resolution          | 10 mA  |
| Accuracy            | 10 mA  |
| Output rate CAN-bus | max. 2 ms per channel (default setting),<br>variable configuration via CAN-Bus |
| Voltage outputs     | 0 VDC to 10 VDC  |

# **CAN-INTERFACE**

| Number      | 1  |
|-------------|--|
| Туре        | 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      | 11 VDC to 30 VDC |
|---------------------|------------------|
| Current consumption | 140 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 INFORMATIONS**

| Housing            | 45 mm DIN-Top-hat rail housing |
|--------------------|--------------------------------|
| Dimensions (LxWxH) | 96 mm x 125 mm x 50 mm         |
| Weight             | 180 g                          |

## **FURTHER DEVICES CW-300 SERIES**

| CW-301 CAN controlled Power Supply    | CW-325 Bus and Signal multiplexer                          |
|---------------------------------------|--|
| CW-310 Wheel Speed Pulse Conditioning | CW-326 Failure Injection Unit                              |
| CW-311 Wheel Speed Unit Simulation    | CW-327 A/D-Converter                                       |
| 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 |