

CANnect CAN FD-Extension

CAN FD EXTENSION MODULE FOR CANNECT GATEWAY



CANWAY's CANnect CAN FD-Extension is an extension module for the High Performance Gateway CANnect, for CAN and LIN. Following the original and popular CANnect's principles, the module is based on state-of-the-art technology. The device provides several features for advanced operation.

The CAN FD interfaces, with full support of the common protocol standard ISO 11898, is one of the main features of the module. Furthermore, several in- and output channels are available for various purposes. This includes: the measurement of analog signals (ADC), output of analog signals (DAC) and output of digital signals (DO). All signals are configured and accessed via the well-known configuration software CW-921. This allows e.g. an assignment to CAN and LIN signals or operation within calculation methods.

Typical applications are for example stimulating different test objects in testbenches or integrating new ECUs and sensors, in an existing car's network. Also, the entire system provides extensive capabilities for generating signals and messages, including bus protocols, in order to simulate ECU prototypes. After a configuration has been downloaded to the CANnect Gateway, the device operates stand-alone and in real-time. And it has still got resources left for implementing custom features for your particular application!

MAIN FEATURES

- Supported bus systems:
4 x CAN FD (up to 8 Mbit/s)
- Common CAN FD standard (ISO 11898)
- Several I/O-Channels for various purposes (ADC, DAC, DO)
- Simulation of ECUs and sensors
- Operates in cooperation with the High Performance Gateway CANnect
- Stand alone operation in real-time, once the device is configured (entire gateway device)
- Full integration to the user-friendly CANnect Configuration Software Environment

CAN FD interface

Number of busses	4, galvanic isolated up to 1 kV
Type	CAN FD ISO 11898-1:2015 CAN protocol versions 2.0 A and 2.0 B
Bitrate	Up to 8 Mbit/s, software-configurable
Termination	Software-configurable independently for each bus

Analog inputs (in preparation)

Number	4, galvanic isolated up to 500 V (Common GND)
Measurement Ranges	±30 VDC (±3, ±10 and ±60 VDC on request)
Resolution	12 Bit
Bandwidth	500 Hz

Analog outputs (in preparation)

Number	4, galvanic isolated up to 500 V (Common GND)
Output voltage range	0 to 10 VDC
Resolution	14 Bit
Output current	max. 10 mA (Shortcircuit proof)

Digital outputs (In preparation)

Number	7, galvanic isolated up to 500 V (Common GND)
Output voltage	60 VDC, 40 VAC (e.g. Vcc, GND ; common rail solid-state relays)
Output current	200 mA

Power supply

Supply voltage	9 to 36 VDC
Current consumption	300 mA at 9 VDC

Environmental conditions

Temperature range operation	-20 °C to 60 °C
Temperature range storage	-20 °C to 70 °C
Relative humidity	35 % to 85 %, non-condensing
Protection class	IP40

Mechanical properties

Housing	Robust aluminum case
Dimensions	54,5 mm x 87mm x 140 mm (total height x width x length)
Connectors	50 pol. D-Sub, female connector; cable available as an accessory, customer-specific cables on request
Additional options	DIN hat rail mounting on request