



# TRION3-CAN-FD



DEWETRON

- ▶ 4-channel CAN interface module
- ▶ Isolated high-speed CAN 2.0B; CAN FD, CAN SIC
- ▶ Up to 8 Mbit/s
- ▶ Supports OBDII, J1939, CAN output
- ▶ Advanced bus fault detection



## Module specifications

| TRION3-CAN-FD specifications                    |   |
|---|---|
| Input channels                                  | 4 with D-SUB-9 connector  |
| Specification                                   | CAN 2.0B, CAN FD, CAN SIC   |
| Physical layer                                  | High-speed CAN, standard: ISO 11898-2:2024 Annex A<br>Signal improvement SIC, standard: CiA 601-4 |
| CAN baud rate                                   | 5 kbps to 1 Mbps  |
| CAN FD baud rate                                | 1 Mbps to 8 Mbps  |
| Internal clock rate / bit timing tq             | 120 MHz / 8.33 ns   |
| Receive data rate                               | Full CAN bus bandwidth<br>DMA data transfer: low system CPU load                                  |
| Timestamp accuracy                              | 0.1 $\mu$ s; timestamp is set at the beginning of the CAN frame                                   |
| Send data rate                                  | Typ. 1000 data frames/s<br>Interrupt data transfer: CPU load is proportional to CAN traffic       |
| Listen only mode                                | Supported   |
| Bus diagnostics                                 | Short-circuit, open circuit detection and BUS status  |
| Termination                                     | Programmable: high impedance or 120 $\Omega$  |
| Isolation voltage                               | 500 V <sub>DC</sub> (CANH, CANL and CAN_GND)  |
| Bus pin fault protection                        | $\pm 50$ V <sub>DC</sub>  |
| Common mode                                     | $\pm 12$ V referred to isolated GND   |
| ESD protection                                  | 8 kV (HBM)  |
| CAN transceiver                                 | TCAN1576  |
| Sensor power supply (per module)                | 5 V, max. 1 A cumulated for all 4 channels<br>12 V, max. 1 A cumulated for all 4 channels         |
| Typical power consumption without sensor supply | 5 W   |

Tab. 76: Module specifications