



TY3-CAN-FD

- ▶ 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

TY-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 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 DMA data transfer: low system CPU load
Timestamp accuracy	0.1 μ s; timestamp is set at the beginning of the CAN frame
Send data rate	Typ. 1000 data frames/s 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 Ω
Isolation voltage	500 V _{DC} (CANH, CANL and CAN_GND)
Bus pin fault protection	± 50 V _{DC}
Common mode	± 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 12 V, max. 1 A cumulated for all 4 channels
Typical power consumption without sensor supply	5 W

Tab. 76: Module specifications