

CAN-CR100



The CAN repeater CAN-CR100 with integrated bus termination resistors and two CAN/CAN FD interfaces can be used to improve the load capacity of the CAN bus with nodes, physical coupling of CAN/CAN FD bus systems or to insert a galvanic isolation.

It creates the necessary flexibility to optimize the structure of CAN/CAN FD networks and to free CAN networks from the restriction to the bus structure. Integrated bus termination resistors prevent reflections on the line ends and ensure optimum communication.

The CAN-CR100 separates a defective segment from the rest of the network, allowing the remaining network to continue working.

FEATURES AND BENEFITS

- CAN and CAN FD interfaces in one device
- Cost savings due to simple wiring
- Almost no influence on real-time behavior
- Greater flexibility in CAN network design
- Separates a defective segment, allowing the remaining network to continue working
- Increased system reliability
- 2 x CAN/CAN FD channels
- Galvanic isolation
- With bus termination resistors

ORDER NUMBER	1.01.0210.20000
Display	2 x CAN status LED (duo LED for communication and errors), Power LED
CAN channels (high speed)	2
CAN FD / CAN channels	2
CAN bus interface	ISO 11898-2 with CAN choke, 2 x screw terminals
CAN bit rates	Up to 1 Mbit/s
CAN FD bus interface	ISO CAN FD and nonISO CAN FD
CAN FD bit rates	Arbitration rate: up to 1000 kbit/s, data rate: up to 8000 kbit/s (verified by testing). User defined bit rates are possible.
CAN bus termination resistors	120 Ohm switchable via DIP switch

ORDER NUMBER	1.01.0210.20000
CAN/CAN FD transceiver	MCP2562FD
Galvanic isolation	1 kV DC / 1 sec, 500 V AC /1 min; CAN 1, CAN 2 and power supply are galvanic isolated against each other
CAN propagation delay (typical)	Typ. 175 ns (35 m bus length)
Power supply	+9 V to +36 V DC
Power consumption at 24 V	Typ. 70 mA, max. 100 mA
Operating temperature	-20 °C to +70 °C
Weight	150 g
Dimensions	22.6 x 99 x 113 mm
Storage temperature	-40 °C to +85 °C
Protection class	IP30
Relative humidity	10 to 95 %, non-condensing
Certification	CE, FCC
Housing material	Polyamid



ACCESSORIES	ORDER NUMBER
Termination adapter for CAN/CAN FD (D-Sub male to female)	1.04.0075.03000
CAN cable 2.0 m (D-Sub male to female)	1.04.0076.00180
CAN Y cable 0.22 m	1.04.0076.00001
CAN Y cable 2.1 m	1.04.0076.00002

PIN ALLOCATION

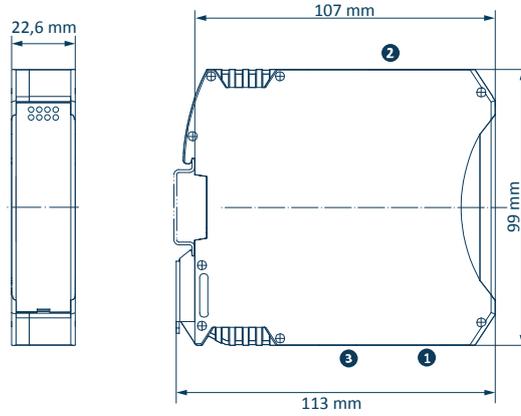
CAN (FD) CONNECTORS ① ②

⊙ 1	□	CAN-High
⊙ 2	□	CAN-Low
⊙ 3	□	CAN-GND
⊙ 4	□	Shield

POWER CONNECTOR ③

⊙ 1	□	V+ (+9 V to +36 V DC)
⊙ 2	□	V-
⊙ 3	□	PE
⊙ 4	□	PE

TECHNICAL DRAWING



CONNECTORS
1 = CAN 1
2 = CAN 2
3 = POWER