DATASHEET

CAN-CR220

The CAN-CR220 repeater with two CAN channels is used for the galvanic isolation of two segments of a CAN network and offers a very high galvanic isolation of 4 kV, allowing it to be utilized in medical applications. It can be used to improve the load capacity of the CAN bus with nodes, to establish a physical coupling of two segments of a CAN bus system or to insert a galvanic isolation.

The CAN repeater creates the necessary flexibility to optimize the structure of CAN networks and to free CAN networks from the restriction to the bus structure. It separates a defective segment from the rest of the network, allowing the remaining network to continue working. The galvanic isolation isolates the CAN segments from each other as well as from the power supply.

The CAN-CR220 is tested according DIN/EN 50178 (DIN VDE 0160: 1988-05 and DIN VDE 0160/A1: 1989-04).

FEATURES AND BENEFITS

- 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 interfaces
- Galvanic isolation
- Protection of segments up to 4 kV

ORDER NUMBER	1.01.0067.44400
Display	2 x CAN status LED (duo LED for communication and errors), Power LED
CAN channels (high-speed)	2
CAN bus interface	ISO 11898-2 with CAN choke. 2 x D-Sub 9 connectors
CAN bit rates	Up to 1 Mbit/s
CAN bus termination resistors	120 Ohm switchable via DIP switch
CAN high-speed transceiver	SN65HVD251

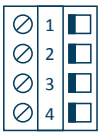
ORDER NUMBER	1.01.0067.44400
Galvanic isolation	2 kV AC/1 min.; 3.5 kV AC/1 sec.; 3.2 kV DC/1 min.; 4 kV DC/1 sec. CAN 1, CAN 2 and power supply galvanic isolated against each other.
CAN propagation delay (typical)	Typ. 175 ns (35 m bus length)
Power supply	+9 V to +32 V DC
Power consumption at 24 V	Typ. 41 mA, max. 100 mA
Operating temperature	-20 °C to +70 °C
Weight	Approx. 300 g
Dimensions	22.5 x 100 x 118 mm
Storage temperature	-40 °C to +85 °C
Protection class	IP30
Relative humidity	10 to 95 %, non-condensing
Certification	CE, FCC
Housing material	Polyamid

CERTIFICATES


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

POWER CONNECTOR ❸



+9 V to +32 V DC
0 V
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CAN CONNECTOR D-Sub 9 ❶ ❷

Pin no.	Signal
2	CAN-Low
3	CAN-GND
7	CAN-High

TECHNICAL DRAWING