Ixxat CAN-CR200

Item number: 1.01.0067.44010

The Ixxat CAN-CR200 repeater with two CAN interfaces and one CAN backbone interface improves the CAN bus load capacity, establishes a physical coupling of bus systems and offers galvanic isolation. Multiple repeaters can be lined up and connected easily via the integrated DINrail bus to create various topologies and optimize network structures.



CAN repeater with backbone bus

Features and benefits

Robust industrial use

Designed for industrial environments, meeting high demands for robustness, temperature ranges, and safety.

Fast and transparent operation

Minimal impact on real-time behavior, equivalent to a short line length (ca. 40 m/200 ns delay). Enabling transparent transmission, compatible with all higher layer protocols.

Enhanced network reliability

Higher system reliability by electrically isolating CAN segments and power up to 1 kV. This enhances the protection of the device against damage to electronics caused by voltage peaks.

Backbone bus for simplified network expansion

To achieve tree or star topologies, multiple repeaters can be connected in series through the integrated backbone bus, seamlessly linking them to a CAN hub for enhanced connectivity.

Flexibility in CAN network design

Helps to optimize CAN network structures by enabling extended layouts (stub lines, star and tree topologies).

Cost savings due to simple wiring

Optimized topologies enable simpler wiring, resulting in less cables and cost savings at installation and maintenance.

Network monitoring and fault recovery

In case of disturbances, the repeater automatically disconnects the affected segment and restores it after the fault is resolved.

Integrated bus termination resistors

Integrated bus termination resistors (120 Ohm, switchable via DIP switch) prevent reflections on the line ends and ensure optimum communication.

Ixxat CAN-CR200



General

Net Width (mm)	100
Net Height (mm)	118
Net Depth (mm)	22.5
Net Weight (g)	136
Packed Width (mm)	14
Packed Height (mm)	4
Packed Depth (mm)	18
Packed Weight (g)	219
Operating Temperature °C Min	-20
Operating Temperature °C Max	70
Storage Temperature °C Min	-40
Storage Temperature °C Max	85
Relative Humidity	10 to 95 %, non-condensing
Current Consumption Type Value at Vcc Nom (mA)	41
Current Consumption Max value at Vcc nom (mA)	100
Input Voltage (V)	+9 V to +32 V DC
Isolation	1 kV DC for 1 sec.
Content of Delivery	CAN repeater, user manual
Mounting	DIN rail mount (bracket included)

Ixxat CAN-CR200



General

Housing Materials	Polyamide housing for top hat rail mounting
Packaging Material	Cardboard
Warranty (years)	1

Identification and Status

Product ID	1.01.0067.44010
Successor	1.01.0211.20000
Country of Origin	Germany
HS Code	8517620000
Dual Usage	No

Physical Features

Connectors / Input / Output	2 x D-Sub 9 connectors, 1 x backbone bus, 1 x power connector
Contains Battery	No

CAN Features

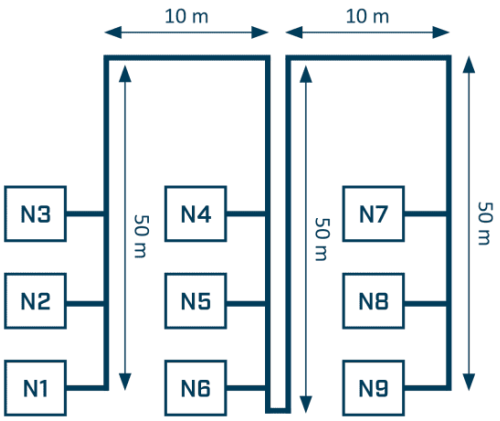
CAN Mode	CAN high-speed (ISO 11898-2) with CAN choke
CAN Transceiver	TI SN65HVD251
CAN Baud Rate	Up to 1 Mbit/s

Certifications and Standards

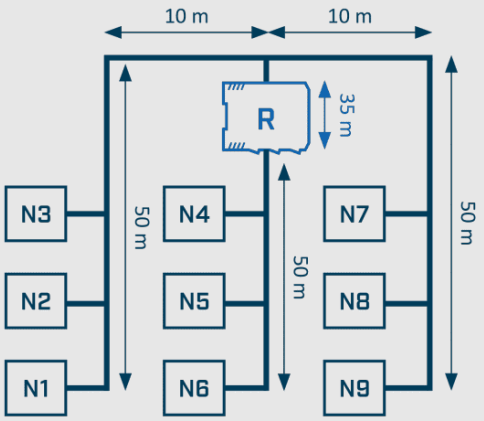
Protection Class IP	IP30
Product Certifications	CE, FCC
WEEE Category	IT and telecommunications equipment

Use Case

Conventional bus structure
The distance between the two nodes furthest apart (1/9) is 220 meters.



Extended structure with drop line
The distance between the two nodes furthest apart (1/6 or 6/9) is 145 meters.



CAN repeaters can be used to better adapt the cable routing to the ambient conditions. Stub lines can be made and the bus structure can be expanded to a star/tree structure, which saves cable lengths. Shorter cable lengths reduce interference on the signal lines and enable higher bit rates. Segments connected via repeaters are galvanically decoupled and therefore offer overvoltage protection for connected participants.