Ixxat CAN-CR210/FO

Item number: 1.01.0068.46010

The Ixxat CAN-CR210/FO repeater with two CAN interfaces, one of which is a Fiber Optic interface (ST plug), enables the conversion of CAN signals from copper wire to fiber optics. It enhances connectivity in high-electromagnetic interference zones and provides the flexibility to optimize network structures. With integrated CAN backbone interface.

CAN repeater with fiber optics (ST) and 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. 60 m/300 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.

Robust fiber optic interface

Fiber optic ensures uninterrupted data transmission in high-electromagnetic disturbance zones, enabling enhanced connectivity for critical applications and high performance.

Integrated bus termination resistors

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

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.

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.

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General

Net Width (mm)	100
Net Height (mm)	120
Net Depth (mm)	22.5
Net Weight (g)	180
Packed Width (mm)	13
Packed Height (mm)	4
Packed Depth (mm)	17
Packed Weight (g)	261
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)	62
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)

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General

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

Identification and Status

Product ID	1.01.0068.46010
Country of Origin	Germany
HS Code	8517620000
Dual Usage	No
Export Control Classification Number (ECCN)	EAR99

Physical Features

Fiber Optic Line Specification	Multi mode fiber optic cables (only glass); Recommended: 50/125 µm, 62.5/125 µm, also compatible with: 100/140 µm, 200 µm (consider max. line length)
Connectors / Input / Output	1 x D-Sub 9 connector, 1 x backbone bus, 2 x ST connector, 1 x power connector
Contains Battery	No

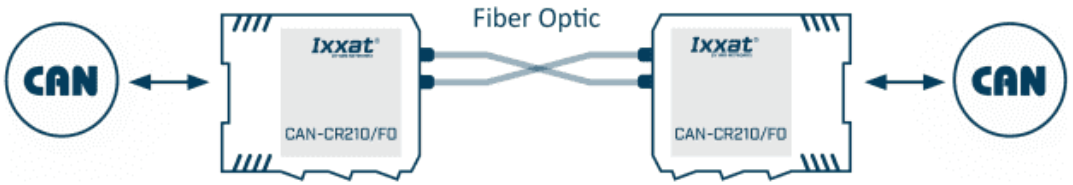
CAN Features

CAN Transceiver	TI SN65HVD251
CAN Baud Rate	Up to 1 Mbit/s

Certifications and Standards

Protection Class IP	IP30
ETIM Classification	EC000698
CE	Yes
FCC	Yes
WEEE Category	IT and telecommunications equipment

Use Case



Fiber optic CAN repeaters enable the bridging of interference-intensive routes using optical lines. They enable complete galvanic decoupling of segments and offer high protection against overvoltage.