

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.



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)



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

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

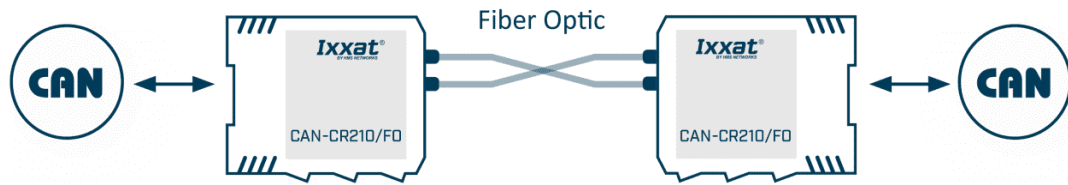
CAN Transceiver	TI SN65HVD251
CAN Baud Rate	Up to 1 Mbit/s

Certifications and Standards

Protection Class IP	IP30
Product Certifications	CE, FCC
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.