Ixxat®
BY HMS NETWORKS

Ixxat CAN-CR210/FO

Item number: 1.01.0068.45010

The Ixxat CAN-CR210/FO repeater with two CAN interfaces, one of which is a Fiber Optic interface (FSMA 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 (F-SMA) 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 reliable data transmission in high-electromagnetic disturbance zones.

✓ **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 easily connected in series through the integrated backbone bus.

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Ixxat CAN-CR210/FO

General

Net Width (mm)	100
Net Height (mm)	120
Net Depth (mm)	22.5
Net Weight (g)	122
Packed Width (mm)	14
Packed Height (mm)	4
Packed Depth (mm)	18
Packed Weight (g)	203
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	1.01.0068.45010
Country of Origin	Germany
HS Code	8517620000
Export Control Classification Number (ECCN)	EAR99
Supply Risk Factor ERP	Volume not defined yet
Purchasing Multiple ERP	1

Physical Features

Connectors / Input / Output	1 x D-Sub 9 connector, 1 x backbone bus, 2 x F-SMA connector, 1 x power connector

CAN Features

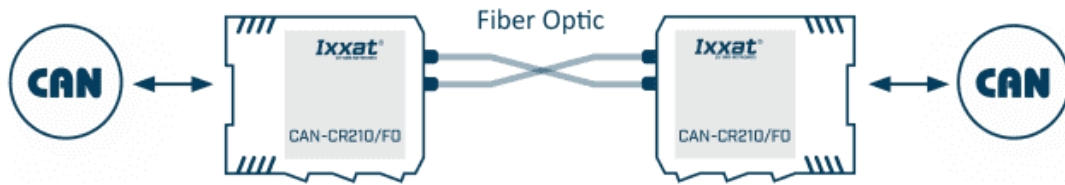|	
CAN Mode	CAN high-speed (ISO 11898-2) with CAN choke
CAN Transceiver	TI SN65HVD251
CAN Baud Rate	Up to 1 Mbit/s

Certifications and Standards

Protection Class IP	IP30
ETIM Classification	EC000698
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.