

## Ixxat CAN-CR110/FO

Item number: 1.01.0210.11220

The Ixxat CAN-CR110/FO repeater with two CAN/CAN FD interfaces, one of which is a Fiber Optic interface, 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.



*CAN/CAN FD repeater with fiber optics*

### 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/CAN FD 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.
- ✓ **Flexibility in CAN FD network design**  
Helps to optimize CAN/CAN FD 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.



## General

Net Width (mm)	105
Net Height (mm)	120
Net Depth (mm)	22.5
Net Weight (g)	180
Packed Width (mm)	13
Packed Height (mm)	5
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)	70
Current Consumption Max value at Vcc nom (mA)	100
Input Voltage (V)	+9 V to +36 V DC
Isolation	1 kV DC for 1 sec.
Content of Delivery	CAN FD 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	1.01.0210.11220
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 screw terminal, 1 x F-SMA connector, 1 x power connector
Contains Battery	No

## CAN Features

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

## CAN FD Features

CAN FD Mode	ISO CAN FD, nonISO CAN FD
CAN FD Transceiver	MCP2562FD
CAN FD Baud Rate	Arbitration rate up to 1000 kBit/s, data rate up to 8000 kBit/s (verified by testing). User defined bit rates are possible.

## Certifications and Standards

cULus	Yes
Protection Class IP	IP20
ETIM Classification	EC000698

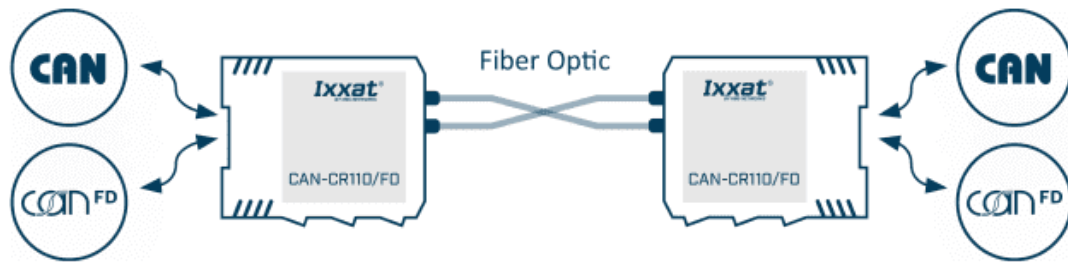


## Certifications and Standards

CE	Yes
FCC	Yes
WEEE Category	IT and telecommunications equipment



## Use Case



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