Ixxat CAN/FD Repeater Standard

Item number: 1.01.0211.20000

The Ixxat CAN/FD Repeater Standard with two CAN/CAN FD interfaces improves the CAN bus load capacity, establishes a physical coupling of bus systems, and offers galvanic isolation. It provides the flexibility to optimize network structures and liberates them from CAN bus structure constraints for optimized operation.

CAN/CAN FD repeater with push-in connectors and termination resistor

Features and benefits

Robust industrial use

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

Removable push-in connectors

Features removable push-in connectors, ensuring hassle-free installation and maintenance without the need for additional tools.

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.

Flexibility in CAN FD network design

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

Fast and transparent operation

Minimal impact on real-time behavior, equivalent to a short line length (ca. 35 m/175 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 5 kV DC for 1 minute. This enhances the protection of the device against damage to electronics caused by voltage peaks.

Integrated bus termination resistors

Integrated bus termination resistors for each CAN channel (120 Ohm, separately switchable by piano switches) prevent reflections on the line ends and ensure optimum communication.

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General

Net Width (mm)	108
Net Height (mm)	149
Net Depth (mm)	27
Net Weight (g)	135
Packed Width (mm)	131
Packed Height (mm)	41
Packed Depth (mm)	175
Packed Weight (g)	190
Operating Temperature °C Min	-25
Operating Temperature °C Max	+70
Storage Temperature °C Min	-40
Storage Temperature °C Max	+80
Relative Humidity	0 to 90 %, non-condensing
Current Consumption Max value at Vcc nom (mA)	< 1 W
Input Voltage (V)	10-30 V DC +-0 %
Isolation	CAN-CAN and CAN-Power - at least 5 kV DC for 1 minute; CAN shield to ground and power to ground - at least 2 kV DC for 1 minute
Mounting	DIN rail mount (bracket included)
Housing Materials	PC ABS, UL 94
Warranty (years)	1

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General

Packaging Material	Cardboard

Identification and Status

Product ID	1.01.0211.20000
Predecessor	1.01.0210.20000,1.01.0210.20200, 1.01.0210.20210, 1.01.0210.20010, 1.01.0067.44010, 1.01.0067.44300, 1.01.0067.44400
Country of Origin	Germany
HS Code	8517620000
Dual Usage	No
Export Control Classification Number (ECCN)	EAR99

Physical Features

Connectors / Input / Output	2 x 4-pin push-in spring connector FKC 2.5/4-ST GY (CAN), 1 x 3-pin push-in spring connector FKC 2.5/3-ST GY (power)
Contains Battery	No

CAN Features

CAN Mode	CAN high-speed (ISO 11898-2)
CAN Baud Rate	14 kBit/s to 1000 kBit/s

CAN FD Features

CAN FD Mode	ISO CAN FD, nonISO CAN FD
CAN FD Baud Rate	14 kBit/s to 8000 kBit/s

Certifications and Standards

Protection Class IP	IP20
ETIM Classification	EC000698
CE	Yes
FCC	Yes
Waste Certification (WEEE)	Yes