

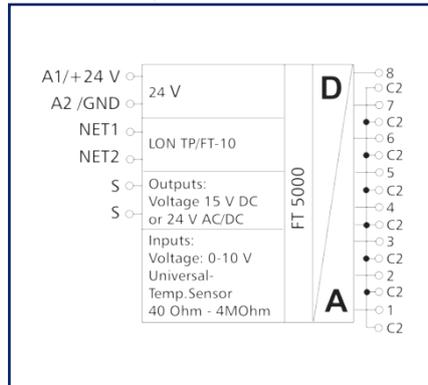
Data sheet

LF-AI8 LON

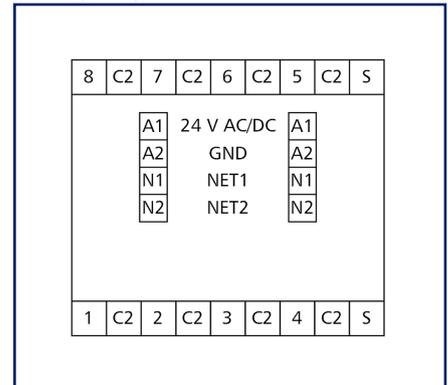
Illustrations



Principle diagram



Wiring diagram



See enlarged drawings at the end of document

Product specification

The LON module with 8 individually configurable resistance or voltage inputs was developed for decentralized switching tasks. It is suitable for detecting resistances and voltages of, for example, passive and active temperature sensors, electrical vent and mixing valves, valve positions, etc. The inputs can be scanned simultaneously by SNVT network variables. Suitable for decentralized mounting on DIN TH35 rail according to IEC 60715 in electrical distribution cabinets.

- Connection with screw type terminal blocks

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EAN 4250184135739
2025/08/19
Version: I

Technical Data

Approvals



Open Energy Management Equipment 34TZ

RS485 interface

Protocol	TP/FT-10, free topology
Neuron	FT5000
Data format	Standard network variables (SNVT)
Transmission parameters	
Transmission rate	78 Kbit/s
Line topology	2700 m / 64 nodes
Free topology	500 m / 64 nodes
Cabling	Twisted Pair

Supply

Operating voltage	24 V AC/DC +/- 10 % (SELV)
Power consumption	
Power consumption AC (max.)	67 mA
Power consumption DC (max.)	24 mA
Duty cycle relative	100 %
Recovery time	550 ms

Inputs

Analog inputs	8, individually configurable
Resistance range	40 Ohm - 4 MOhm
Resolution resistance input	0,2 K
Error resistance input < 12 kOhm	0.1 %
Error resistance input >= 12 kOhm	1 %
Voltage range	0 V - 10 V DC
Resolution voltage input	10 mV
Error voltage input	10 mV

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Housing	
Dimensions	
Dimension (W x H x D)	50 mm x 69.3 mm x 60 mm
Dimension (W x H x D)	1.969 in. x 2.728 in. x 2.362 in.
Weight	126 g
Mounting style	Standard rail TH35
Mounting position	any
Apposition	without distance The maximum quantity of LON modules connected side-by-side is limited to 15 or to a maximum power consumption of 2 Amps (AC or DC) per connection to the power supply. For any similar block of additional modules a separate connection to the power supply is necessary.
Connection type	Screw type terminal blocks
Indicator	green and yellow LED
Terminal blocks	
Supply and bus	
Terminal block	4-pole
Solid wire (AWG)	max. 1.5 mm ² / max. 16 AWG
Stranded wire (AWG)	max. 1 mm ² / max. 18 AWG
Wire diameter	min. 0.3 mm max. 1.4 mm
Module connection	
Wire cross section solid	0.34 mm ² - 2.5 mm ² / AWG 22-12
Wire cross section multi	0.25 mm ² - 2.5 mm ² / AWG 22-12
Wire cross section with wire ferrule	0.25 mm ² - 2.5 mm ² / AWG 22-12
Screw torque (max.)	0.5 Nm
Stripping length (min.)	8 mm
Protection circuit	Polarity reversal protection for DC operating voltage

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Material

Color	gray
Material - Terminal block	Polyamid 6.6 V0
Material - Covers	Polycarbonat

Protection category according to IEC 60529

Protection category - housing (acc. to IEC 60529)	IP40
Protection category - terminal blocks (acc. to IEC 60529)	IP20

Climatic Data

Operating	
Temperature - Operating °C	-5 °C - 55 °C
Temperature - Operating °F	23 °F - 131 °F
Relative humidity	max. 85 % non-condensing
Storage	
Temperature - Storage °C	-20 °C - 70 °C
Temperature - Storage °F	-4 °F - 158 °F

Classifications

ETIM 7.0	EC000794
ETIM 8.0	EC000794
ETIM 9.0	EC000794
ETIM 10.0	EC000794

Software and additional documents

Software and documentation	Further documentation is available for free download at www.metz-connect.com
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Application note

This product is a standard product of METZ CONNECT. METZ CONNECT is not aware of the specific intended use of the goods by the Customer or any customers of the Customer. The Customer guarantees that it has fully and sufficiently tested the use of the goods and any product modifications, product changes or product enhancements with regard to the specific intended use in accordance with the state of the art or in any other way. At METZ CONNECT's request, the Customer shall submit and make available meaningful evidence (e.g. test and laboratory protocols, certifications, etc.).

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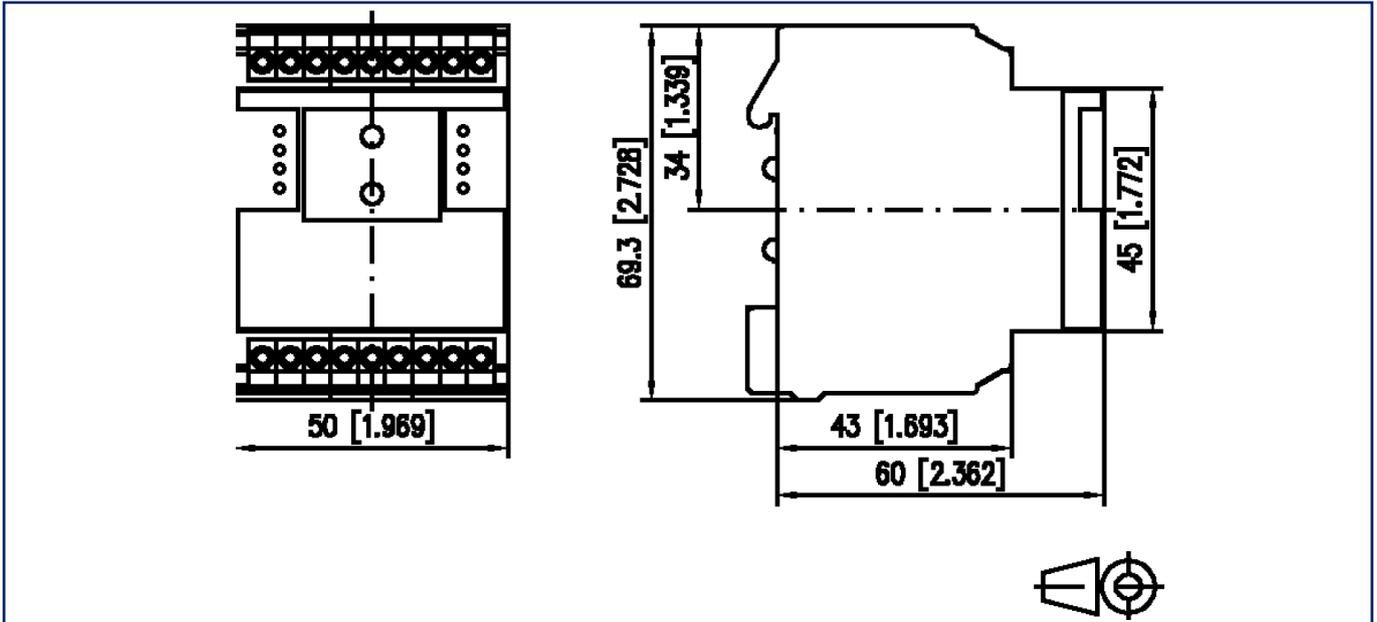
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Accessories

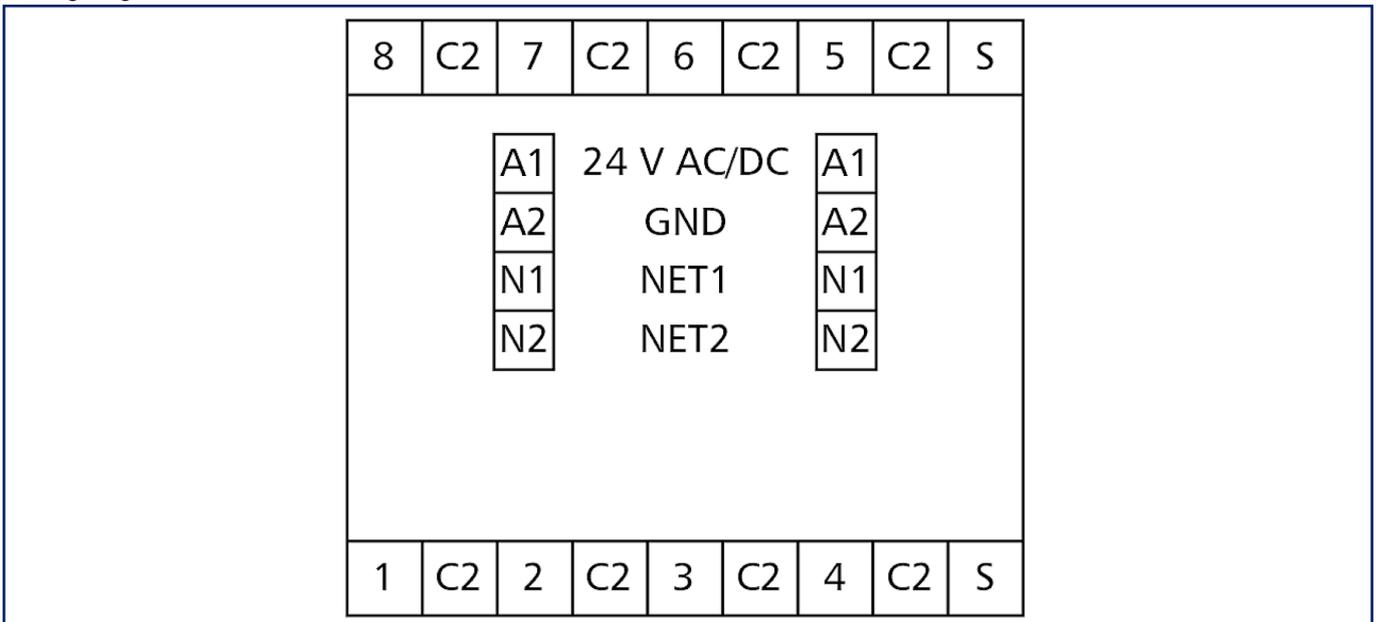
P/N	Designation
110369	Terminal block Type 259
110486	HUB DC
110561	Power supply NG4 24 V DC
11087913	LF-FAM LON
31135104	Typ 135 RIACON 135_3.5

Illustrations

Dimensional drawing



Wiring diagram



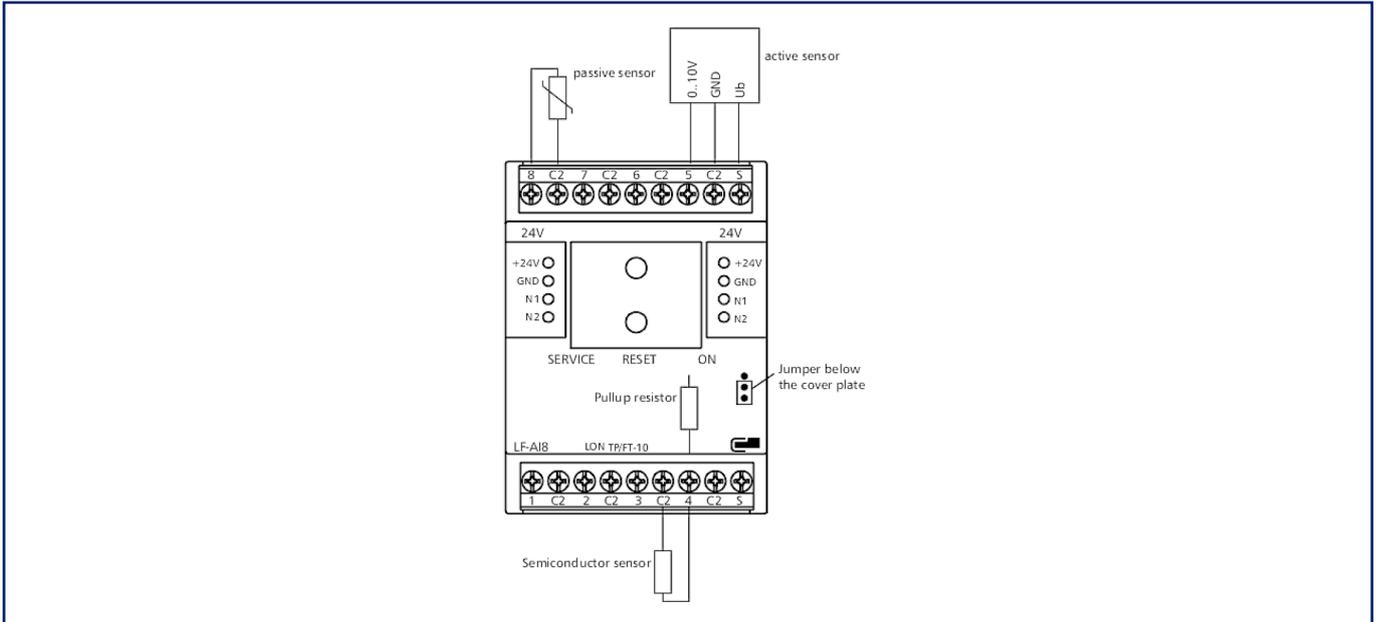
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Connection example



Principle diagram

