

# Data sheet

## LF-AI8

### LON module with analog inputs

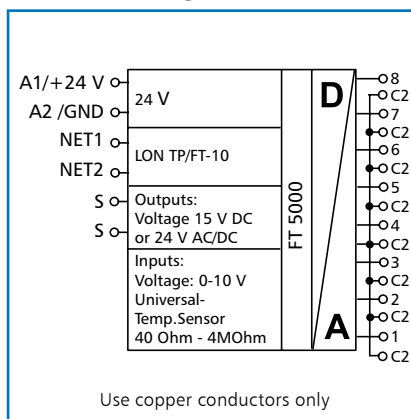
Part number  
11085313

2015-03-20

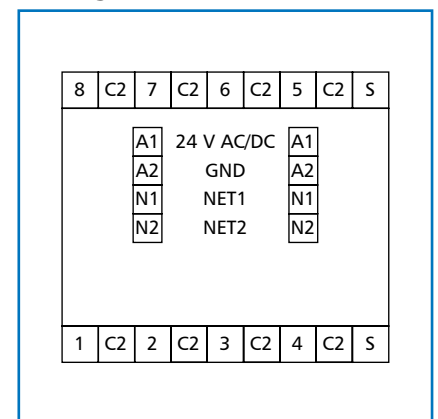
#### Illustrations



#### Principle diagram



#### Wiring



#### Product description

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.

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**Technical data**

**Approvals**

C-UL Certification	Open Energy Management Equipment 34TZ
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**LON interface**

Transceiver	TP/FT-10 free topology
Neuron	FT5000
Data format	Standard network variables (SNVT)
Transmission rate	78 kBit/s
Max. length	
Line topology	2700 m / 64 nodes
Free topology	500 m / 64 nodes
Cabling	Twisted Pair

**Supply**

Operating voltage range	20 to 28 V AC/DC (SELV)
Current consumption	67 mA (AC) / 24 mA (DC)
Relative duty cycle	100 %
Recovery time	550 ms

**Input**

Analog inputs	8x individually configurable, resistance or voltage
Resistance range	40 Ohm to 4 MOhm
Temperature range	adjustable
Resolution	0.2 K
Error	about ±0.2 °C
Voltage input	0 to 10 V DC
Resolution	10 mV (0.0 to 100 %)
Error	about ±10 mV

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<b>Housing</b>	
Dimensions WxHxD	1.969 x 2.728 x 2.362 in. (50 x 69.3 x 60 mm)
Weight	126 g
Mounting position	any
Mounting	on TH35 rail per IEC 60715
Side-by-side mounting	Without space 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.
Material	
Housing	polyamide 6.6 V0
Terminal blocks	polyamide 6.6 V0
Cover plate	polycarbonate
Type of protection (IEC 60529)	
Housing	IP40
Terminal blocks	IP20
<b>Terminal blocks</b>	
Supply and bus	
Terminal block	4-pole
Solid wire	max. AWG 16 (1.5 mm <sup>2</sup> )
Stranded wire	max. AWG 18 (1.0 mm <sup>2</sup> )
Wire diameter	0.3 mm to max. 1.4 mm
Module connection, analog inputs	
Solid wire	max. AWG 12 (4 mm <sup>2</sup> )
Stranded wire	max. AWG 14 (2.5 mm <sup>2</sup> )
Wire diameter	0.3 mm to max. 2.7 mm
Protective circuitry	Polarity reversal protection of operating voltage Polarity reversal protection of supply and bus
<b>Temperature range</b>	
Operation	23 °F to 131 °F (-5 °C to +55 °C)
Storage	-4 °F to +158 °F (-20 °C to +70 °C)
<b>Display</b>	
Operation	green LED
Status (Service)	yellow LED
<b>Additional documents</b>	
Software description, mounting note, certificates	All additional documents are available for download at <a href="http://www.metz-connect.com">www.metz-connect.com</a>

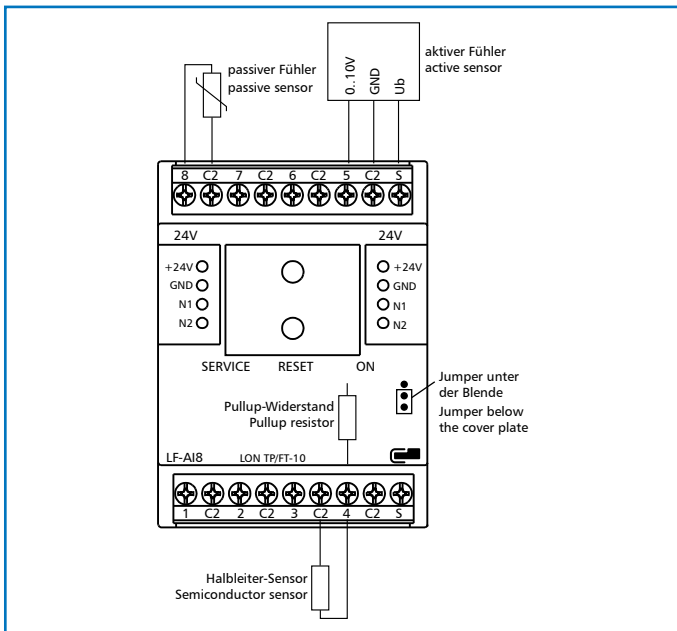


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Connection example



Dimensional drawing

