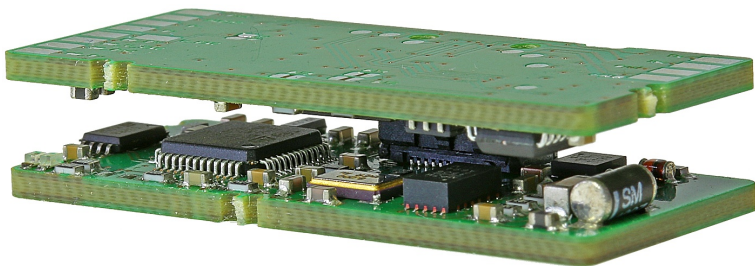


2-CHANNEL TRANSMITTER



- IO-LINK, 2 CHANNELS
- SG BRIDGE + UNIVERSAL
- 16 BIT / 24 BIT
- ACCURACY 0.05 %
- NO SG ON CHANNEL 2



IO-Link



IP00

KEY DATA

Property	Value	Property	Value
Channel 1	strain gauge full bridge	Channel 2	universal (1)
Resolution	16 bit / 24 bit	Accuracy	max. 0.05 % of range
Output	IO-Link interface	Supply	24 VDC
Dimensions	40 x 17 x 8.25 mm	Protection	IP00
Operating temp.	-20 ... +80 °C	Order code	EOME · maker ID NV

A two-channel OEM board: channel 1 measures a strain gauge full bridge, channel 2 a temperature sensor — Pt100 or a thermocouple — and both go out over one IO-Link interface. The universal channel does not support a strain gauge bridge, so two force channels are not possible with this board today.



TECHNICAL DATA

INPUT

Channel 1	strain gauge full bridge, unit-less
Channel 2	universal, °C preset
Range, both channels	freely settable within -3200.0 ... +3200.0
Pt100 (1 x)	3-wire, -200 ... 800 °C
... sensor current	0.9 mA
Thermocouple type J	-210 ... 1200 °C
... type K	-200 ... 1372 °C
... type N	-200 ... 1300 °C
Bridge supply	3 V · min. 1 × 350 Ω, 2 × 700 Ω for two bridges
Strain gauge, ch. 2	not supported (1)
On request	other units, ranges and sensor types

OUTPUT AND PERFORMANCE

Interface	IO-Link, level 0 / 24 V
Accuracy	max. 0.05 % of range + sensor error
Resolution, strain gauge	16 bit
Resolution, universal	24 bit
Filter, strain gauge	0.5 s
Filter, temperature	25 s
Switch-on delay	< 5 s
Response time	20 ms
Cable length	max. 2 m sensor / 20 m master

POWER SUPPLY

Voltage	24 VDC
Current, standard	< 30 mA
Switching current (SIO)	max. 100 mA
Total current	max. 130 mA
Reverse polarity	protected — no function, no damage

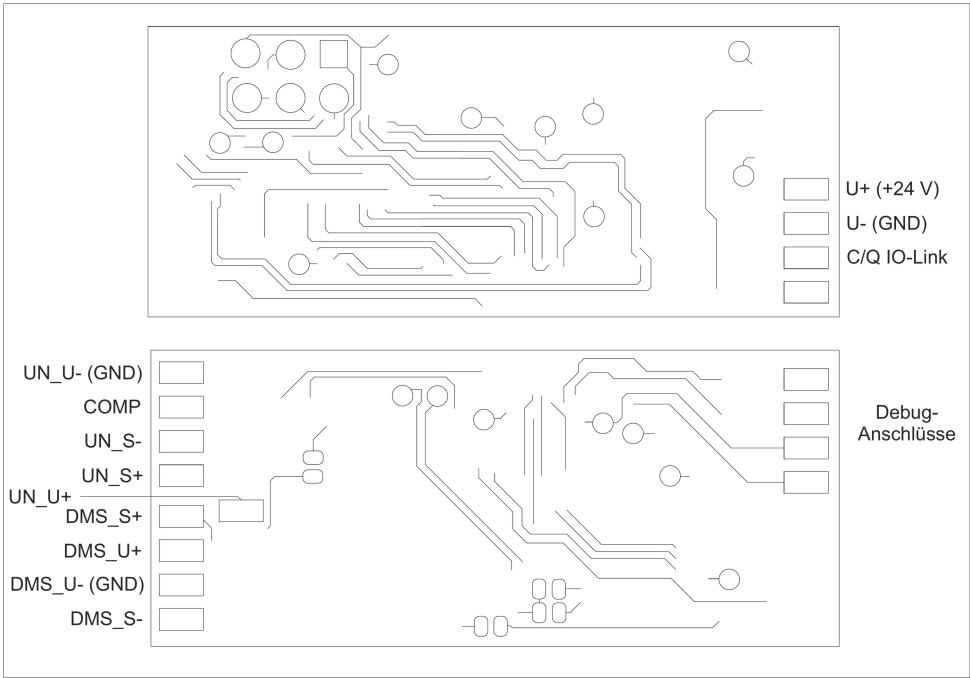
MECHANICS AND ENVIRONMENT

Dimensions	40 × 17 × 8.25 mm
Build	two boards, stacked
Material	FR4, PBT
Protection	IP00
Connection	solder pads 2.7 × 1.5 mm
Mounting position	any
Weight	approx. 6.5 g
Operating temperature	-20 ... +80 °C
Storage temperature	-20 ... +85 °C
Humidity	30 ... 90 % rH, non-condensing
... reference	40 °C
EMC	EN 61000-6-2:2005
	EN 61000-6-4:2007 + A1:2011

(1) The universal channel does not support a strain gauge bridge. Anyone who needs two force channels cannot use this board for it today.



TERMINAL ASSIGNMENT

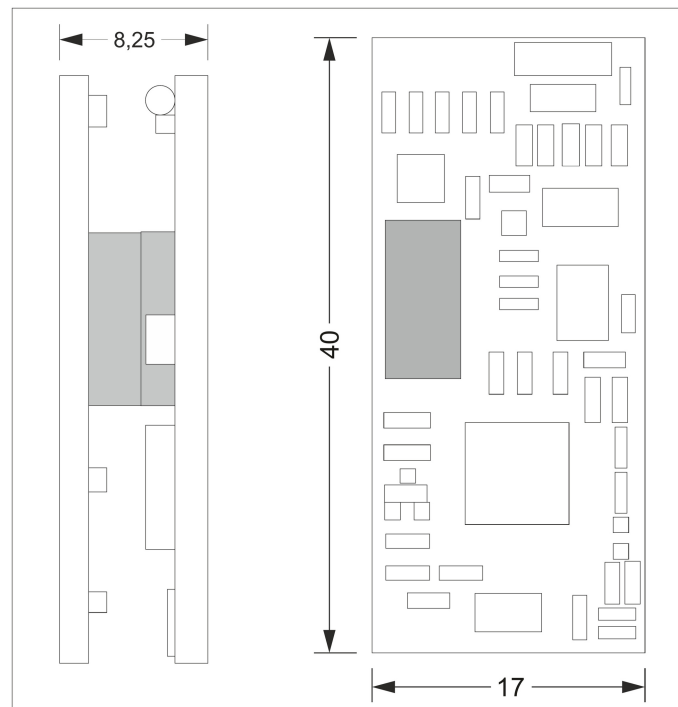


Solder pads: supply and IO-Link on the right (U+ / U- / C·Q), the two inputs on the left — UN_ for the universal channel including COMP, DMS_ for the strain gauge channel. The debug pads are labelled as such by the manufacturer.

Kanal 1 und Kanal 2		Kanal 2	
DMS		Widerstandsthermometer	Thermoelement

Wiring examples of the manufacturer: strain gauge bridge on channel 1 and channel 2, resistance thermometer and thermocouple on channel 2. COMP is the compensation connection of the universal channel.

DIMENSIONS



40 × 17 mm with a height of 8.25 mm. The height comes from the build: the EOME is two boards, stacked — visible in the product photo on page 1. The single-channel EOMC of the same outline is 4.5 mm high.



CONFORMITY

EMC	Tested to EN 61000-6-2:2005 and EN 61000-6-4:2007 + A1:2011
IO-Link	Level to the IO-Link specification. The IODD is obtained from the IODD Finder
Protection class	IP00 — the bare board has to be installed in an enclosure
Functional safety	None. EOMF is the version with PL c / SIL 1
Explosion protection	None

ORDER INFORMATION

Accessories

- An IO-Link master is required for configuration and operation, and so is the matching IODD file, which is downloaded from the IODD Finder.

ORDER KEY

Field	Value	Meaning
Product	EOME	octogon product code — 2-channel IO-Link transmitter, OEM board
Manufacturer key	NV · 4 digits	the manufacturer runs the series under ID NV
Digit 1 — input	2	strain gauge and universal (channel 1 and 2)
Digit 2 — output	1	IO-Link
Digit 3 — setup	0	to customer specification — please state it
Digit 4 — special	0 · 1	0 no · 1 yes (please specify)

Factory setting depends on the channel: universal — unit °C, maximum range; strain gauge — unit-less. The order code is formed from the product code and the four digits.

