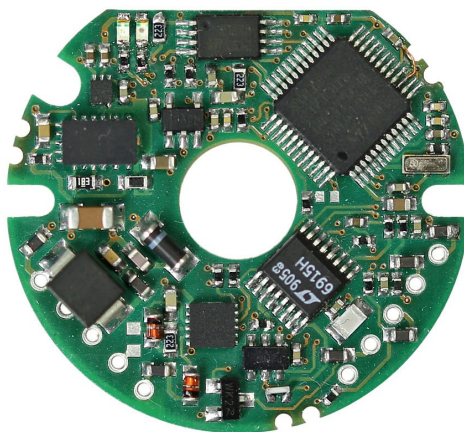


IO-LINK TRANSMITTER ROUND



- IO-LINK, 1 CHANNEL
- STRAIN GAUGE BRIDGE
- 16 BIT RESOLUTION
- ACCURACY 0.05 %
- ROUND BOARD Ø 31.4 MM



IO-Link



IP00

KEY DATA

Property	Value	Property	Value
Input	strain gauge full bridge	Output	IO-Link interface
Resolution	16 bit	Accuracy	max. 0.05 % of range
Bridge supply	3 V	Filter	0.5 s
Dimensions	Ø 31.4 x 4.8 mm, hole Ø 8 mm	Protection	IP00
Operating temp.	-20 ... +80 °C	Order code	EOMD · maker ID QW

A single-channel OEM board for installation in customer equipment: it turns the signal of a strain gauge full bridge into an IO-Link measurement — for force and pressure. The measuring range is freely settable and unit-less, so the board takes the unit of the application.



TECHNICAL DATA

INPUT

Channel	1 × strain gauge full bridge
Unit	unit-less, freely selectable
Measuring range	freely settable within -3200.0 ... +3200.0
Bridge supply	3 V
Bridge resistance	min. 1 × 350 Ω for max. 1 full bridge
	min. 2 × 700 Ω for max. 2 full bridges
More bridges	possible; the minimum resistance rises accordingly
On request	other units, ranges and sensor types

OUTPUT AND PERFORMANCE

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

POWER SUPPLY

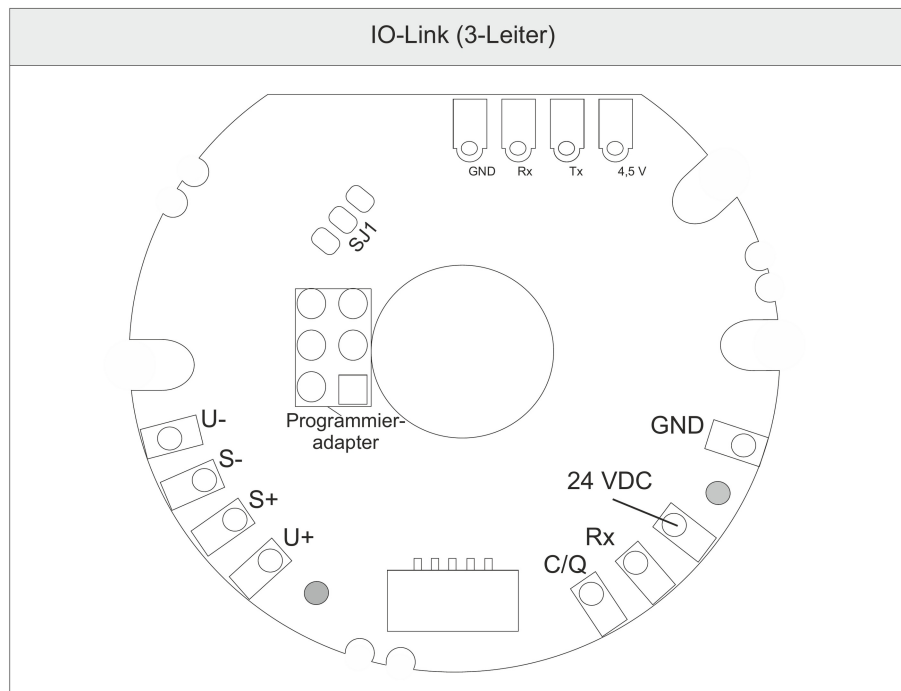
Voltage	24 VDC
Current, standard	< 30 mA
Switching current (SIO)	max. 100 mA
Total current	max. 130 mA
Reverse polarity	protected — no function, no damage

MECHANICS AND ENVIRONMENT

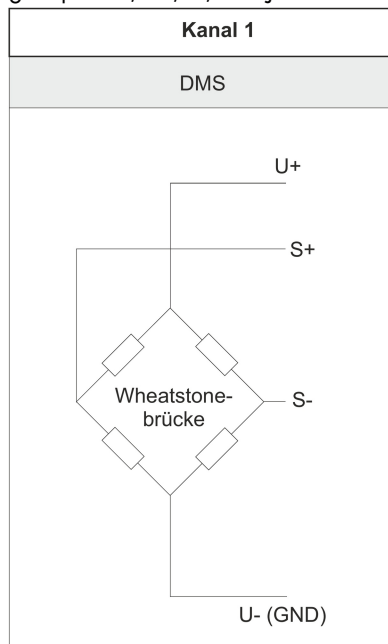
Dimensions	31.4 × 28.6 × 4.8 mm, hole Ø 8 mm
Material	FR4, PBT
Protection	IP00
Connection	solder pads 2.7 × 1.5 mm
Mounting position	any
Weight	approx. 3.5 g
Operating temperature	-20 ... +80 °C
Storage temperature	-20 ... +85 °C
Humidity	30 ... 90 % rH, non-condensing
... reference	40 °C
EMC	EN 61000-6-2:2005
	EN 61000-6-4:2007 + A1:2011



TERMINAL ASSIGNMENT



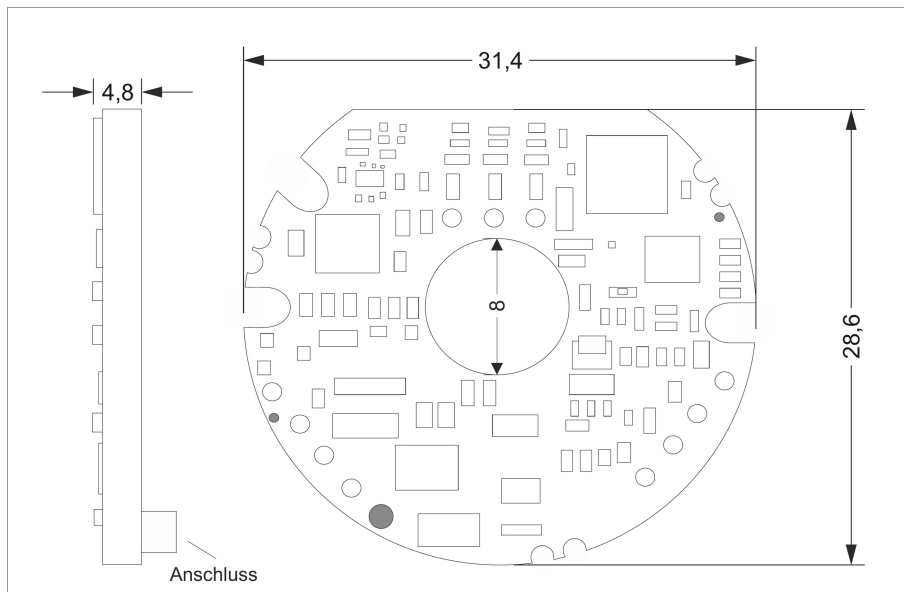
Solder pads of the round board, IO-Link in 3-wire technique: 24 VDC, GND and C·Q at the edge, plus Rx and the programming adapter (GND, Rx, Tx, 4.5 V) and the strain gauge input U+, S+, S-, U-. SJ1 is a soldered jumper.



Wiring of the strain gauge full bridge on channel 1, as given by the manufacturer.



DIMENSIONS



Round board, 31.4 × 28.6 mm with a height of 4.8 mm and a hole Ø 8 mm in the centre. Electrically it is the EOMC — the form is the whole difference, and the manufacturer runs it as a type of its own with its own ID rather than as a digit in an order key.



CONFORMITY

EMC	Tested to EN 61000-6-2:2005 and EN 61000-6-4:2007 + A1:2011
IO-Link	Signal level to the IO-Link specification. The IODD is obtained from the IODD Finder
Protection class	IP00 — the bare board carries no protection of its own and has to be installed in an enclosure
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	EOMD	octogon product code — IO-Link transmitter, OEM board
Manufacturer key	QW · 4 digits	the manufacturer runs the series under ID QW
Digit 1 — input	0	strain gauge
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)

The factory setting is a transmitter without configuration. The order code is formed from the product code and the four digits.

