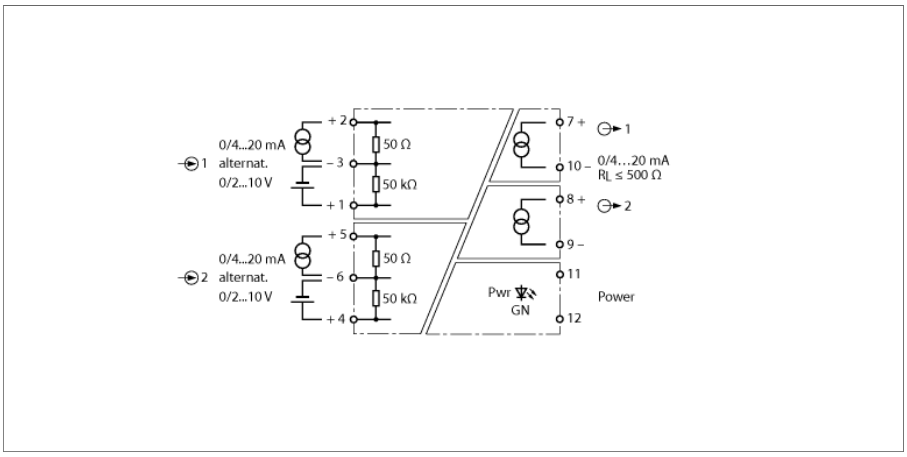
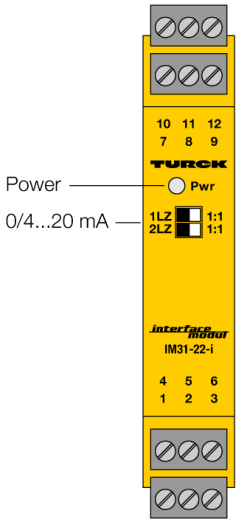
Analog signal isolator
2-channel
IM31-22-I





Normalized active voltage or current signals are transmitted galvanically isolated via the 2-channel analog signal isolator IM31-22-I.

The device is equipped with two input circuits of 0/2…10 V or 0/4…20 mA and two short-circuit proof output circuits of 0/4…20 mA.

The transmission characteristic is adjusted via a DIP switch on the front. In switch position 1:1 the input signal is transmitted without interference and made available at the outputs. In "LZ" switch position, a dead-zero signal at the input (0…10 V or 0…20 mA) is converted and provided as a live-zero signal at the output (4…20 mA).

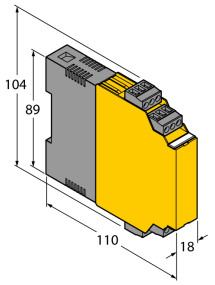
A green LED indicates operational readiness.

- Transmission of normalized analog signals
- Input circuit: 2 × 0/2…10 V or 0/4…20 mA
- Output circuit: 2 × 0/4 0…20 mA
- Complete galvanic isolation
- Input reverse-polarity protected
- TR CU

Edition • 2025-02-26T14:30:25+01:00

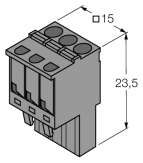
Type	IM31-22-I
ID	7506325
Nominal voltage	Universal voltage supply unit
Operating voltage	20…250 VAC
Frequency	40…70 Hz
Operating voltage U_B	20…125 VDC
Power consumption	≤ 2.2 W
Voltage input	0/2…10 VDC
Input resistance (voltage)	≥ 50 kΩ
Input current	0/4…20 mA
Input resistance (current)	≤ 50 Ω
Output circuits	
Output current	0/4…20 mA
Load resistance current output	≤ 0.5 kΩ
Response characteristic	
Rise time (10…90 %)	≤ 50 ms
Fall time (90…10 %)	≤ 50 ms
Measuring accuracy (including linearity, hysteresis and repeatability)	≤ 0.1 % of full scale
Reference temperature	23 °C
Temperature drift	≤ 0.005 % of full scale/K
Galvanic isolation	
Test voltage	2.5 kV RMS
Displays/Operating elements	
Operational readiness	Green
Mechanical data	
Protection class	IP20
Flammability class acc. to UL 94	V-0
Ambient temperature	-25…+70 °C
Storage temperature	-40…+80 °C
Dimensions	104 x 18 x 110 mm
Weight	140 g
Mounting instructions	DIN rail (NS35) or panel
Housing material	Plastic, Polycarbonate/ABS
Electrical connection	4 × 3-pin removable terminal blocks, reverse polarity protected, screw terminal
Terminal cross-section	1 × 2.5 mm²/2 × 1.5 mm²
Tightening torque	0.5 Nm

Dimensions



Edition • 2025-02-26T14:30:25+01:00

Accessories

Type code	Ident no.		Dimension drawing
IM-CC-3X2BK/2BK	7541218	Cage clamp terminals for IM modules (Ex-devices with 18 mm overall width); includes: 4 pcs. of 3-pin black terminals	

Edition • 2025-02-26T14:30:25+01:00