

SIGNAL CONDITIONER

Links to further documents for this series:

[Manual](#)

[OS10 Installer](#)

[OS10 Manual](#)

[OS10 Software](#)



IMX SERIES

Key-Features:

- Multifunctional unit with several operating modes for HTL/TTL and SSI
- Input and clock frequencies up to 1 MHz
- 16 bit analog output, configurable for voltage or current operation
- USB interface and RS232/RS485-interface for configuration and serial readout
- Linearisation with 24 control points
- Auxiliary voltage output 5 and 24VDC for encoder supply

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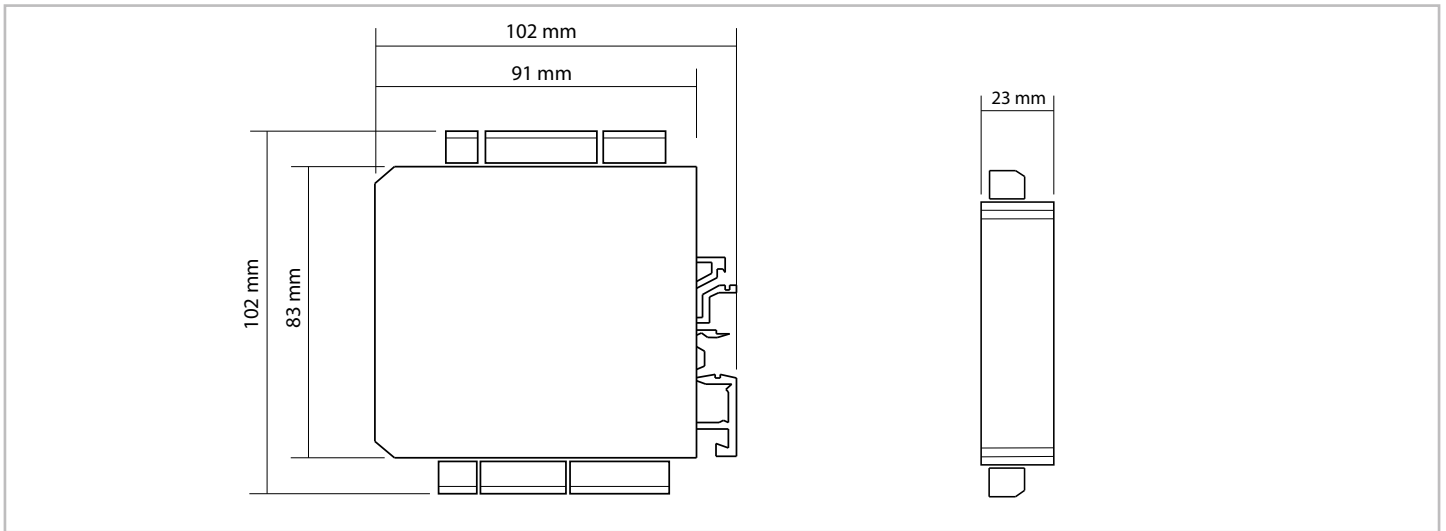
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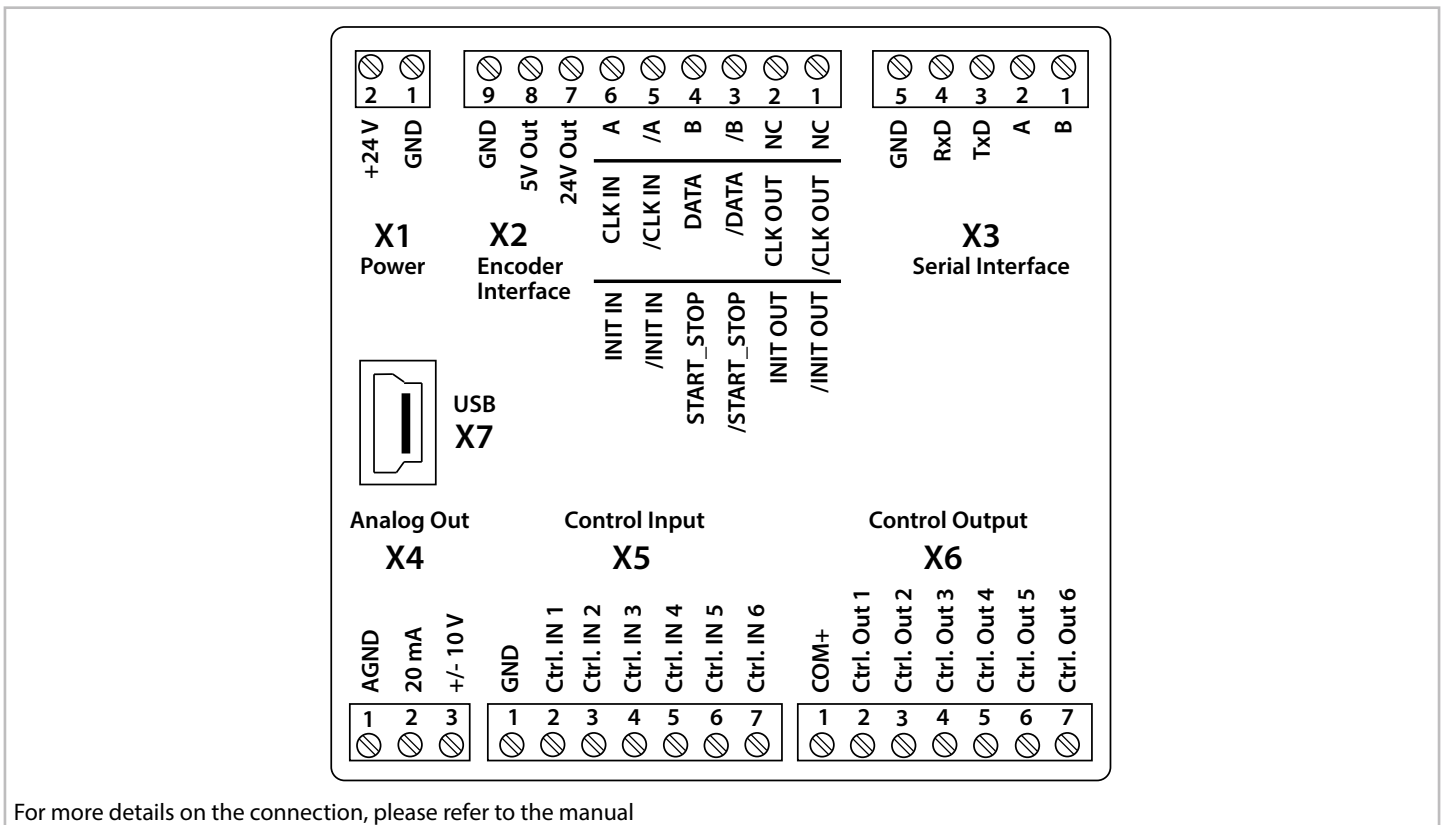
TECHNICAL DATA

Connections	Connector type	screw terminal, 1.5 mm ² / AWG 16
Power supply (DC)	Input voltage Protection circuit Consumption Fuse protection	18 ... 30 VDC reverse polarity protection approx. 50 mA (unloaded) external: T 0.5 A
Encoder supply	Output voltage Output current	5 VDC and 24 VDC (approx. 1 V lower than the power supply) max. 250 mA
Incremental inputs	Number (channels) Configuration RS422 HTL differential HTL Single Ended TTL Frequency measurement accuracy	A, B (HTL Single Ended, TTL Single Ended) A, /A, B, /B (RS422, HTL Differential) RS422, HTL differential, HTL Single Ended, TTL max. 1 MHz (RS422 differential signal >0.5 V) max. 1 MHz (HTL differential signal >1 V) max. 350 kHz, (Low: 0...5 V, High: 9...30 V) max. 350 kHz, (Low: 0...0.6 V, High: 2.2...5 V) ±50 ppm
SSI interface	Number (channels) Configuration Format Frequency Resolution Load	Clock, /Clock, Data, /Data Master or Slave Binary or Gray code max. 1 MHz 10 ... 32 Bit max. 3 mA / Ri > 10 kΩ / 10 pF
Start/Stop-interface	RS422 input RS422 output Pulse width Init-pulse Frequency Init-pulse Clock frequency time measurement Resolution	1x (Start_Stop, /Start_Stop); 1x (ext. Init_In, ext. /Init_In) 1x (Init_Out, /Init_Out) 1...9 μs (adjustable) 62.5...5000 Hz (adjustable) 48 MHz Depending on the waveguide velocity of the encoder
Control inputs	Number of inputs Format Frequency Load	6 HTL, PNP (10 ... 30 V) max. 10 kHz max. 2 mA / Ri > 15 kΩ / 470 pF
Analog output	Configuration Voltage output Current output Resolution Accuracy Reaction time	current or voltage operation -10...+10 V (max. 2mA) 0/4...20 mA (burden: max. 270 Ω) 16 Bit ± 0.1 % at 0...+45°C ± 0.15 % at -20...0 °C and +45...+60 °C <1 ms
Control outputs	Number of outputs Format / level Output current Reaction time	6 5 ... 30 V (depends on the Com+ voltage), PNP max. 200 mA <1 ms
Serial interface	Format Baud rate	RS232 or RS485 9600, 19200 or 38400 baud
USB interface	Mini-USB	15200 Baud, Data Format 8 none 1
Display	LED	green status LED
Housing	Material Mounting Dimensions (w x h x d) Protection class Weight	Plastic housing 35 mm DIN rail (EN 60715) 23 x 102 x 102 mm IP20 approx. 100 g
Ambient temperature	Operation Storage	-20...+60 °C (not condensing) -25...+75 °C (not condensing)
Failure rate	MTBF in years	59.1 a (continuous operation at 60 °C)
Conformity and standards	EMC 2014/30/EU RoHS (II) 2011/65/EU, RoHS (III) 2015/863	EN 61326-1: 2013 for industrial location EN 55011: 2016 + A1: 2017 + A11: 2020 Class A EN IEC 63000: 2018

TECHNICAL DRAWING



ELECTRICAL CONNECTION



For more details on the connection, please refer to the manual

ORDER CODE

IMX

Subject to change without prior notice.

WayCon Positionsmesstechnik GmbH

Email: info@waycon.de

Internet: www.waycon.biz

WayCon

Positionsmesstechnik

Headquarters Munich

Mehlbeerenstr. 4

82024 Taufkirchen

Tel. +49 (0)89 67 97 13-0

Fax +49 (0)89 67 97 13-250

Office Cologne

Auf der Pehle 1

50321 Brühl

Tel. +49 (0)2232 56 79 44

Fax +49 (0)2232 56 79 45