

Your Global Automation Partner

TURCK

IMX12 Interface Series



Interface Series IMX12

Interface devices are the true all-rounders in the control cabinet. They combine protecting, isolating, converting and supply tasks in the smallest space. A further major challenge are the requirements in standards. In this environment, the users expect reliability, precision and safety.

Turck sets a new standard in the field of Ex-safety-barriers and Ex-analog-signal isolators with the new interface device series. Fast and precise signal processing in the smallest space, reliable supply of the connected instrumentation and long maintenance-free operation are the most important criteria in the selection.

The IMX12 series sets standards in many respects. The devices were developed according to the current norms and standards, and are the latest interface platform on the market. You therefore benefit from investment security and availability for a long period of time. The devices of the IMX12 series are designed for processing of switching, NAMUR, frequency, current, voltage and resistance signals.



Highest Channel Density

Four connection possibilities on field and control side enable a channel density of 6.25 mm/channel, also for temperature measuring amplifiers with 2 x 4-wire Pt100 connection. The 2-channel isolating switching amplifiers of the IMX12 series offer two relay switching outputs on the control side. This saves up to 50 % space on the DIN-rail.



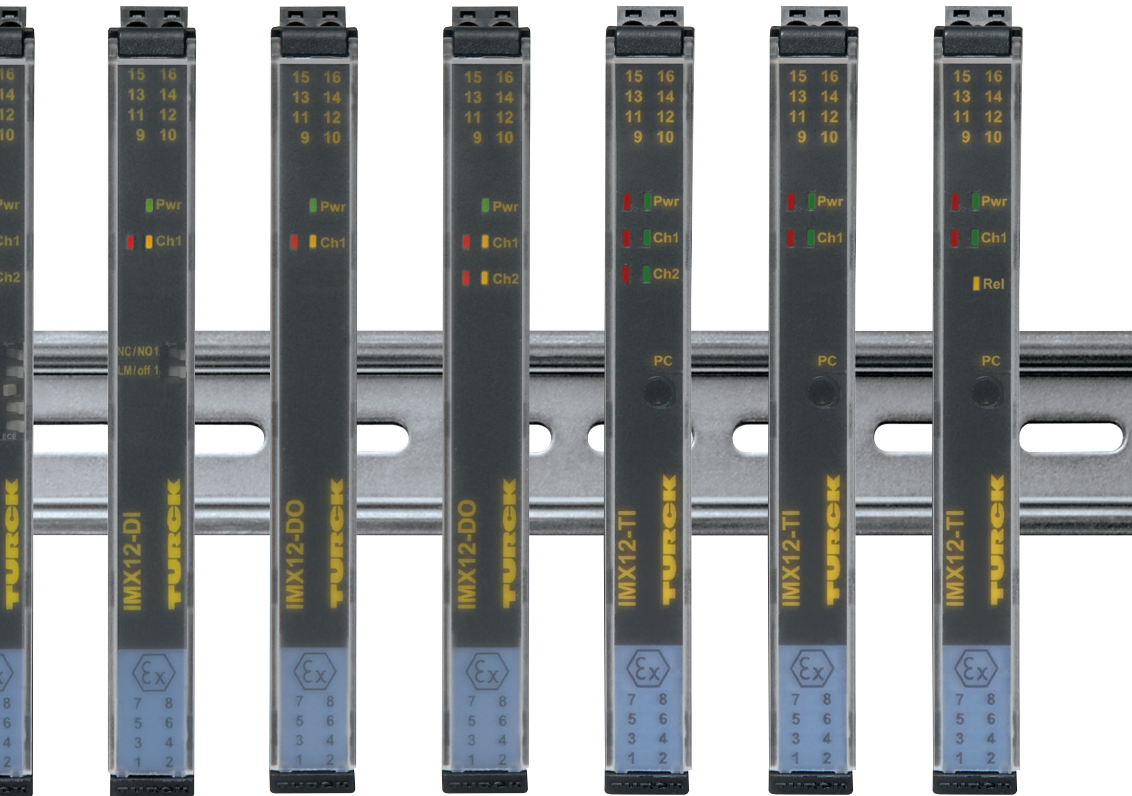
Reliable

Turck builds on many years of experience in the field of interface technology. The IMX series combines this experience with state-of-the-art technology. We offer an excellent basis for securing your investments, also in the long term and under changed market conditions.



Global

Turck is a globally operating company, thus fulfilling requirements of international markets. We offer worldwide approvals, and thus ensure the applicability of devices in different systems.



DI AI
FI TI
PA
AO DO

Best Total Performance

Precision is not only defined by the linearity error. Influences of temperature, power supply, or even connected load, may adversely affect the accuracy. With the IMX12 series we speak plainly. The analog signal isolators offer the best total performance in the 12.5 mm class with 0.085 % of full scale, 40 °C ambient temperature. Accurate readings can be transferred easily to the control systems from now on.

Fastest Isolating Switching Amplifier

Usually isolating switching amplifiers work up to a limit frequency of 5 kHz. For applications with higher frequencies, for example, speed measurements or flow measurements, special frequency converters had to be used. The isolating switching amplifiers of the IMX12 series offer up to 15 kHz switching frequency and can thus be used in applications that until now were reserved to special devices. This helps reducing storage costs and efforts.



Safe
Safety first – is a maxim at Turck . With the IMX12 series, we want to contribute to your system security. All devices have been developed and manufactured in accordance with the requirements of the IEC61508 and can be used in safety circuits up to SIL2.

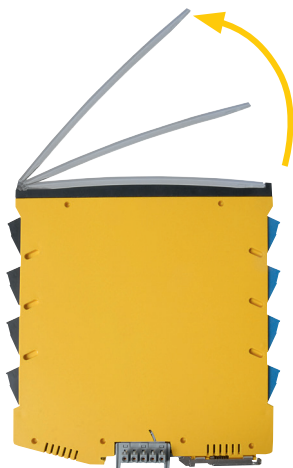


Flexible
No application is similar to the other. This provides a high degree of adaptability of the instrumentation. With diverse functionality and a wide voltage range of 10 to 30 VDC, the IMX12 series is tailored to these requirements.

IMX12 – Types and Features

Ident. no.	Type code	Description
7580000	IMX12-DI03-1S-1NAM1R-0/24VDC	1-channel isolating switching amplifier with relay output, NAMUR-Repeater
7580004	IMX12-DI03-1S-1NAM1T-0/24VDC	1-channel isolating switching amplifier with transistor output, NAMUR-Repeater
7580016	IMX12-DI01-2S-2R-0/24VDC	2-channel isolating switching amplifier with relay output
7580020	IMX12-DI01-2S-2T-0/24VDC	2-channel isolating switching amplifier with transistor output
7580024	IMX12-DI01-2S-2PP-0/24VDC	2-channel isolating switching amplifier with push-pull output stage
7580301	IMX12-AI01-1I-2IU-H0/24VDC	1-channel HART® isolating transducer with splitter function
7580305	IMX12-AI01-2I-2IU-H0/24VDC	2-channel HART® isolating transducer
7580401	IMX12-AO01-1I-1I-H0/24VDC	1-channel HART®-output analog signal isolator
7580405	IMX12-AO01-2I-2I-H0/24VDC	2-channel HART®-output analog signal isolator
7580505	IMX12-TI02-1TCURTDR-1I1R-C0/24VDC	1-channel universal temperature transducer with current output and limit value
7580509	IMX12-TI02-2TCURTDR-2I-C0/24VDC	2-channel universal temperature transducer with current output
7580513	IMX12-TI01-2RTDR-2I-C0/24VDC	2-channel temperature transducer with current output
7580101	IMX12-DO01-1U-1U-0/24VDC	1-channel solenoid valve
7580105	IMX12-DO01-2U-2U-0/24VDC	2-channel solenoid valve

Dimensions	Technical data	
	Operating voltage	10...30 VDC
	Suitable for use in safety circuits up to	SIL 2 acc. to IEC 61508
	Dimensions	12.5 x 112 x 110 mm
	Application areas	II (1) G, II (1) D
	Explosion protection type	[Ex ia Ga] IIC; [Ex ia Da] IIIC Ex nA nC [ia Ga] IIC/IIB T4 Gc
	Ambient temperature	-25...+70 °C



Availability/Reliability

- Transparent cover

High channel density

- 4 Connection possibilities on each side

Easily mounted

- Power supply via optional power rail

28 subsidiaries and over
60 representations worldwide!

