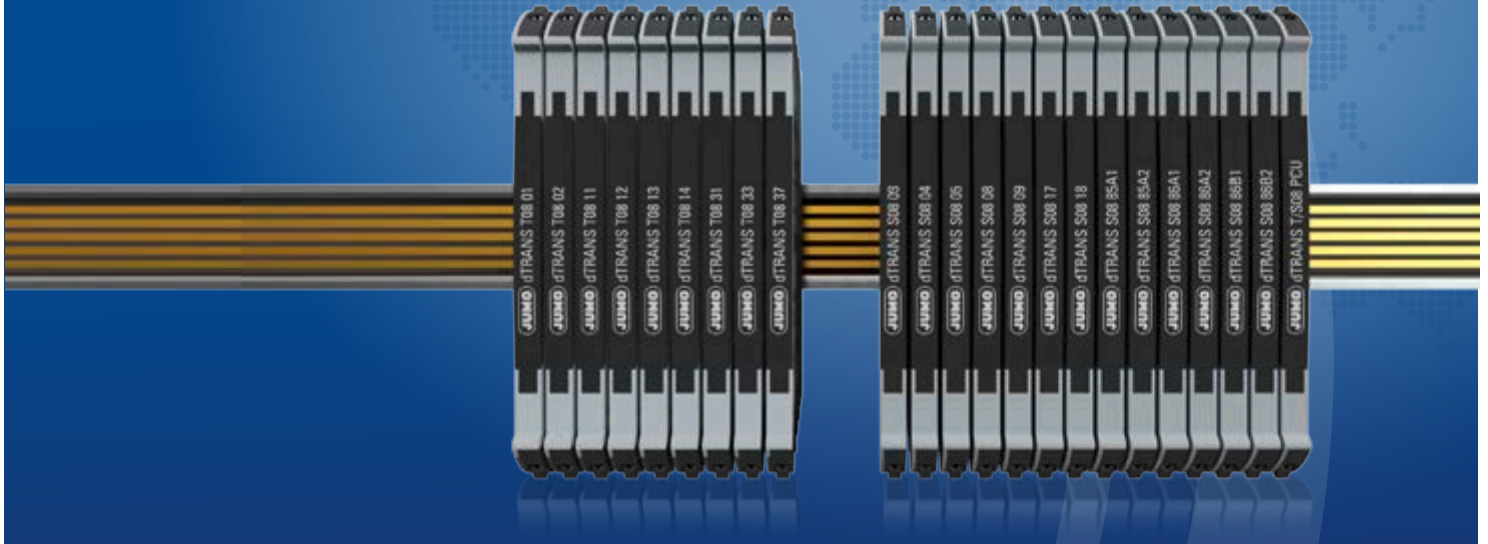




More than **sensors + automation**



JUMO dTRANS T08

JUMO dTRANS S08

Slim design – great performance

Temperature transmitter as well as signal and isolating converter series



Small width – great power: the series advantages offered by JUMO dTRANS T08 and JUMO dTRANS S08 at a glance

Small width

- The device's small width of only 6 mm saves valuable space in the control cabinet during installation
- All devices can be mounted on a DIN rail or bus bar without the need to take an air gap into account

High degree of precision and reliability

- Precision with a basic accuracy of up to 0.05 % in all available signal ranges
- Galvanic isolation of 2,500 V AC for all devices
- High interference immunity according to NAMUR NE21

Short response time

- Fastest conversion of signals into process measurements for the control system
- Response time of up to <30 ms (temperature transmitter)
- Response time of up to <7 ms (signal and isolating converter)
- Especially suitable for rapidly changing signals (e.g. pressure, flow, and temperature)

Low temperature drift

- Large ambient temperature range of -25 to +70 °C for precise measurements
- Low temperature coefficient with error <0.01 %/°C

Simple startup

Application areas

- Mechanical and plant engineering
- Control cabinet construction
- Process industry
- Chemical industry
- Industrial furnaces
- Pharmaceutical industry
- Plastics industry
- Cooling systems
- Renewable energy
- Power plant technology
- Water treatment
- Heating and cooling industry
- Food industry

Approvals

ATEX, IECEx, UL, DNV GL, Hart®

- Up to 1,000 measuring ranges can be set directly via DIP switches for the temperature transmitters – input and output signal types/characteristics can be set for signal/isolating converters which ensures fast startup and adaptation directly on-site without a PC and setup program
- HART® device versions also via HART® Communicator and/or DTM with the PC program PACTware – allows HART® users to perform startup with conventional tools
- Device status visible from signal LED on the front of many models – errors can be quickly identified during setup, which shortens startup time

Other advantages

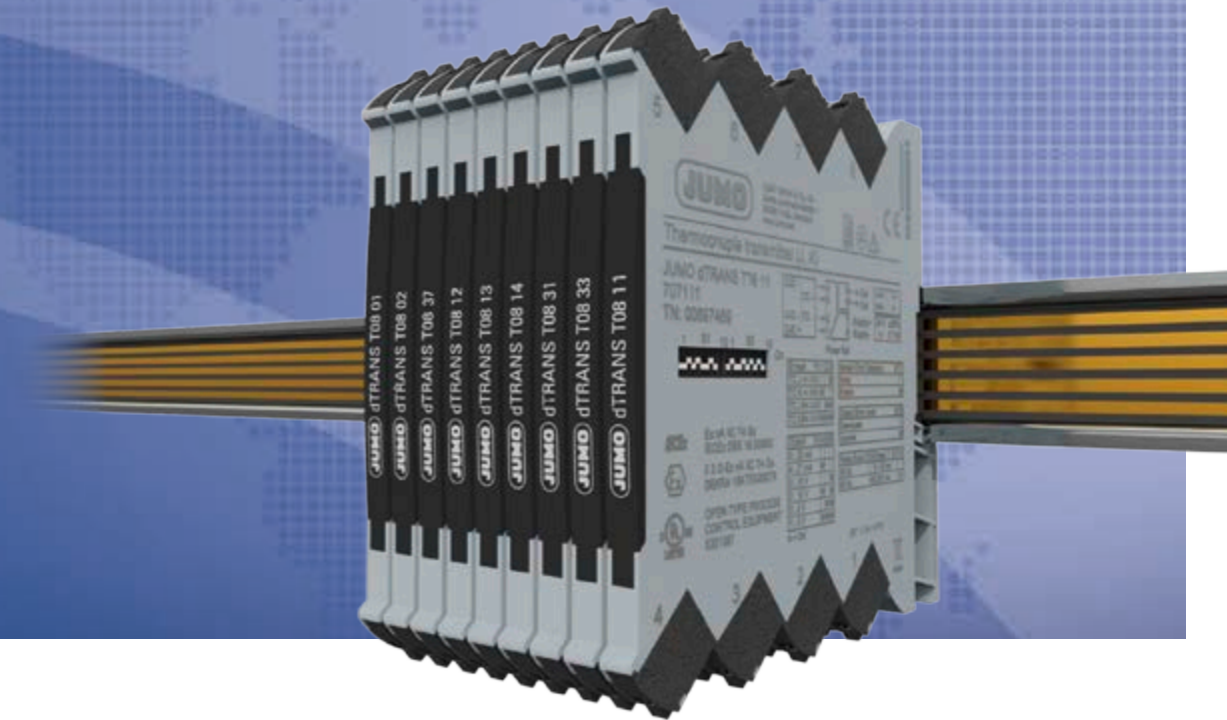
- All terminals withstand up to ±31.2 V DC voltage – this provides protection against wiring errors as only a direct voltage of 24 V DC is used normally
- High vibration resistance of up to 4 G – ensures stable measurement and/or signal behavior even under critical conditions
- Low power consumption (<0.65 to 1.2 W) reduces the cooling effort for the control cabinet

Small width – great power

The JUMO dTRANS T08 temperature transmitter series

Temperature transmitters form the basis of a smooth process flow. They are ultimately responsible for the conversion of the physical temperature signal into a standardized output signal – the quality of the signal is crucial here. All devices from the JUMO dTRANS T08 temperature transmitter series have the following product advantages:

- Rapid startup possible on-site anywhere in the world without a PC – very simple setup of more than 1,000 different temperature measuring ranges via DIP switches
- High degree of basic accuracy of $\leq 0.1\%$ for all selected measuring ranges



Technical data*

Designation			JUMO dTRANS T08 01 Eco thermocouple transmitter (J, K)	JUMO dTRANS T08 02 Eco transmitter (Pt100)	JUMO dTRANS T08 11 Thermocouple transmitter (J, K)	JUMO dTRANS T08 12 Transmitter (Pt100)	JUMO dTRANS T08 13 HART® transmitter (Pt100, J, K)	JUMO dTRANS T08 14** Universal transmitter	JUMO dTRANS T08 31 Two-wire transmitter (Pt100, J, K)	JUMO dTRANS T08 33 Two-wire transmitter (Pt100)	JUMO dTRANS T08 37 Two-wire HART® transmitter (Pt100, J, K)
Type/data sheet			707101	707102	707111	707112	707113	707114	707131	707133	707137
Input	Thermo-couple	J and K	•		•		•	J and K; additionally B, E, J, K, L, N, R, S, T, U, W3, W5, LR	•		•
		Int. CJC	•		•		•	•	•		•
		Ext. CJC			•		•	•	•		•
	Pt100	Two/three/four wire		•		•	•	Such as Pt100, Pt500, Pt1000	•	•	•
Output (current or voltage)	Current	Active	0(4) to 20 mA	0(4) to 20 mA	0(4) to 20 mA	0(4) to 20 mA	4 to 20 mA; 20 to 4 mA (HART 7)	0 to 20 mA; 4 to 20 mA; 20 to 0 mA; 20 to 4 mA			
		Passive							4 to 20 mA; 20 to 4 mA	4 to 20 mA; 20 to 4 mA	4 to 20 mA; 20 to 4 mA (HART 7)
	Voltage		0(1) to 5 V; 0(2) to 10 V	0(1) to 5 V; 0(2) to 10 V	0(1) to 5 V; 0(2) to 10 V	0(1) to 5 V; 0(2) to 10 V		0(0.2) to 1 V; 0(1) to 5 V; 0(2) to 10 V; 1 to (0.2)0 V; 5 to (1)0 V; 10 to (2)0 V			
Front LED power supply			•	•	•	•	•	•			
Power supply			24 V DC, $\pm 30\%$	24 V DC, $\pm 30\%$	24 V DC, $\pm 30\%$; also via bus bar	24 V DC, $\pm 30\%$; also via bus bar	24 V DC, $\pm 30\%$; also via bus bar	24 V DC, $\pm 30\%$; also via bus bar	Loop power supply (5.5 to 35 V DC)	Loop power supply (3.3 to 35 V DC)	Loop power supply (6.2 to 35 V DC)
Isolation					2,500 V	2,500 V	2,500 V	2,500 V	2,500 V		2,500 V
Accuracy			<0.1 % in all available areas under <1 °C	<0.1 % in all available areas or <0.2 °C	<0.05 % in all available areas or <0.5 °C	<0.05 % in all available areas or <0.1 °C	<0.05 % in all available areas or <0.1 °C	<0.1 % in all available areas	<0.05 % in all available areas or <0.1 °C	<0.1 % in all available areas or <0.2 °C	<0.05 % in all available areas or <0.1 °C

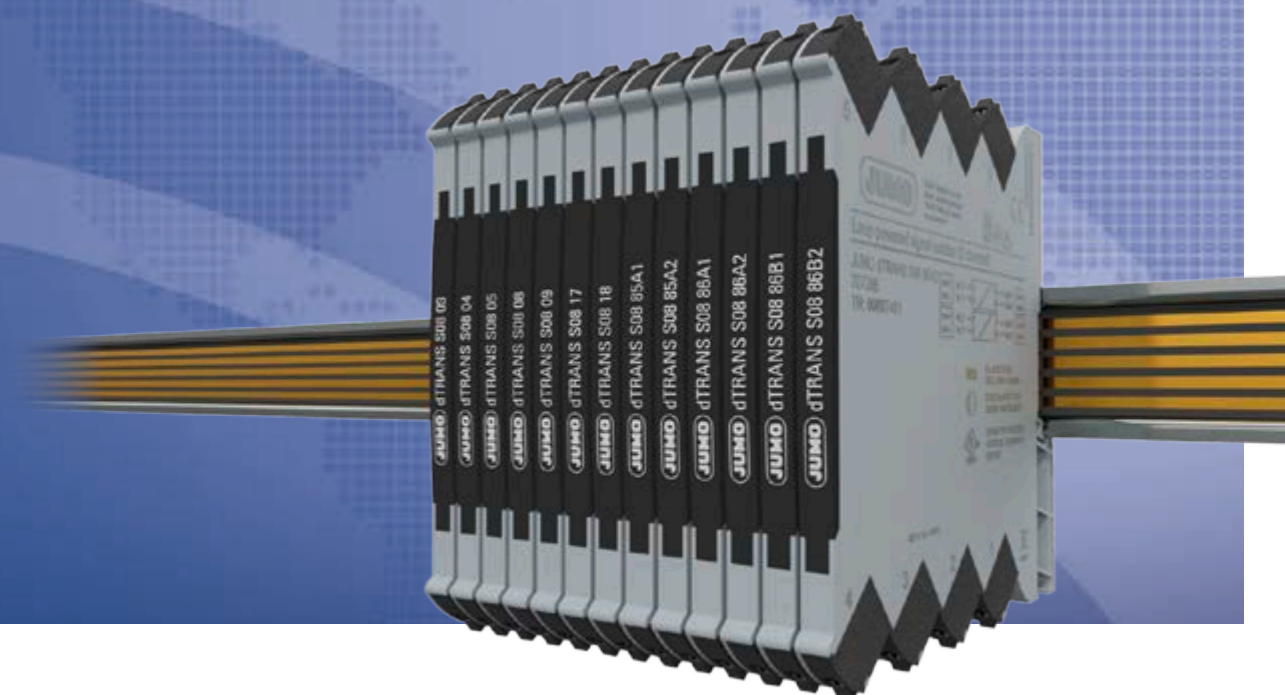
* You can find further information in the respective data sheets

**Only configurable with control panel BD 08 14 and docking station DS 08 14; input also configurable for 0 to 10 V, 0 to 20 mA, potentiometer 10 Ω to 100 k Ω

Small width – great power: the JUMO dTRANS S08 signal and isolating converter series

Signal and isolating converters convert, isolate, and measure any type of standard signal to ensure safe and reliable plant processes. All devices from the JUMO dTRANS S08 signal and isolating converter series have the following product advantages:

- Simplest configuration via DIP switches – rapid startup and adaptation possible directly on-site without a PC and setup program
- Insulation resistance 2,500 V AC (test voltage) – ensures stable measurement with critical sensor/signal potential couplings
- Safe galvanic isolation – prevents the formation of earth loops with standard signals and thereby ensures measuring accuracy
- Basic accuracy for standard signal isolation of up to 0.05 % in all available conversion ranges



Technical data*

Designation			JUMO dTRANS S08 03 Signal isolator (mA)	JUMO dTRANS S08 04 Signal converter (V, mA)/supply isolator	JUMO dTRANS S08 05 Eco signal converter (V, mA)	JUMO dTRANS S08 08 Signal isolator/splitter (mA)	JUMO dTRANS S08 09 Signal converter (V, mA)/ supply isolator/splitter	JUMO dTRANS S08 17 Bipolar signal converter/isolator	JUMO dTRANS S08 18 Bipolar signal converter/splitter	JUMO dTRANS S08 85 Loop powered signal isolator	JUMO dTRANS S08 86 Two-wire transmitter signal amplifier or isolation amplifier
Type/data sheet			707203	707204	707205	707208	707209	707217	707218	707285 **	707286 ***
Input	Current	Active	0 to 23 mA	0 to 20 mA; 4 to 20 mA	0 to 20 mA; 4 to 20 mA	0 to 23 mA	0 to 20 mA; 4 to 20 mA	±10 mA; ±20 mA	±10 mA; ±20 mA	0 to 23 mA	3.5 to 23 mA (type S08 86B1 and S08 86B2)
		Passive		4 to 20 mA (supply isolator)			4 to 20 mA (supply isolator)				3.5 to 23 mA (type S08 86A1 and S08 86A2)
	Voltage			0(1) to 5 V; 0(2) to 10 V	0(1) to 5 V; 0(2) to 10 V		0(1) to 5 V; 0(2) to 10 V	±5 V ±10 V	±5 V ±10 V		
	Bipolar							●	●		
Output	Current	Active	0 to 23 mA	0(4) to 20 mA	0(4) to 20 mA	0 to 23 mA	0(4) to 20 mA	0(4) to 20 mA	0(4) to 20 mA; bipolar wiring: ±10 mA, ±20 mA	0 to 23 mA	
		Passive									3.5 to 23 mA
	Voltage			0(1) to 5 V; 0(2) to 10 V	0(1) to 5 V; 0(2) to 10 V		0(1) to 5 V; 0(2) to 10 V	0(1) to 5 V; 0(2) to 10 V	0(1) to 5 V; 0(2) to 10 V		
	Splitter 1 input – 2 outputs					●	●		●		
Front LED			●	●	●	●	●	●	●		
Power supply			24 V DC, ±30 %; also via bus bar	24 V DC, ±30 %; also via bus bar	24 V DC, ±30 %; also via bus bar	24 V DC, ±30 %; also via bus bar	24 V DC, ±30 %; also via bus bar	24 V DC, ±30 %; also via bus bar	24 V DC, ±30 %; also via bus bar	Loop powered input	Loop powered output (6.0 to 35 V DC)
Isolation			2,500 V	2,500 V	2,500 V	2,500 V	2,500 V	2,500 V	2,500 V	2,500 V	2,500 V

* You can find further information in the respective data sheets

** Also available in two-channel version (S08 85A2)

*** Also available in two-channel version (S08 86A2 and S08 86B2)



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