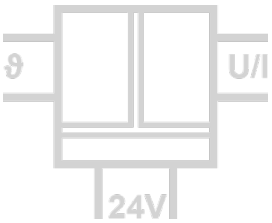
Temperature Transmitter D62T 45300

for Pt, Ni and TC Standard-Sensors, programmable per USB and DIP switch



The Temperature Transmitter D62T 45300 converts the sensor signal on input to temperature linear standard signal 0/4 to 20 mA or 0 to 5/10 V.

Due to the easy configuration via USB interface and the calibrated range selection per DIP switch the Transmitter is suitable for flexible use. The high reliability and the protective separation are further features, which ensure a safe system operation.

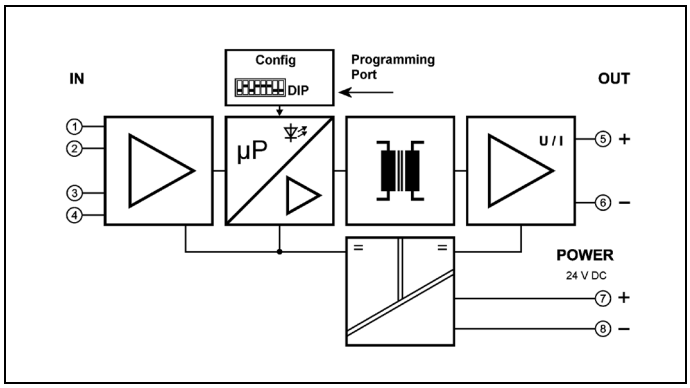
With the USB Programming-Kit DRAGOset the Transmitter can be configured and all data can be stored by a PC. In mode of programming no additionally auxiliary power is required.

Pluggable cross-connectors for the auxiliary power supply ensure fast and economical installation. The slim housing with 6.2 mm wide saves significant space on DIN-rail in the switch cabinet.

The optimized efficiency of the D62T 45300 power pack contributes a significant reduction of the unit's own heat generation. This is reflected in extremely high MTBF, which means highest reliability and long-term stability. A green LED on the front of the unit has been provided to monitor the power supply. The status of power supply and sensor connection will be displayed by a LED on front.

- **Universal Temperature Measuring Input**
  for Platinum, Nickel and Thermocouple Standard Sensors
- **Easy configurable per USB or DIP switch**
  Sensor type, measuring range, sensor connection und output signal easy programmable per USB interface
  - without supply power -
  or calibrated range selection per DIP switch
- **3-port isolation**
  Protection against erroneous measurements due to parasitic voltages or ground loops
- **Extremely slim design**
  6.2 mm thin housing for DIN rail mounting
- **Cross-connector for the auxiliary power supply**
  fast and economical installation
- **Protective Separation acc. to EN 61140**
  Protects service personnel and downstream devices against impermissibly high voltage
- **Maximum reliability**
  No maintenance costs
- **5 Years Warranty**
  Defects occurring within 5 years from delivery date shall be remedied free of charge at our plant (carriage and insurance paid by sender)

Block diagram



Technical Data

Input						
Resistance Thermometer		Sensor	Measuring range	Span min.	Measuring error max. of	Temperature influence
		Pt100	-200 °C to +850 °C	50 K	< 0.1 K / 0,05 %	< 50 ppm/K
		Pt1000	-200 °C to +850 °C	50 K		
		Ni 100	-50 °C to +175 °C	50 K		
	Sensor connection	**4-wire**, 3-wire, 2-wire				
	cable resistance	< 100 Ω per wire				
	Sensor current	0.2 mA				
	Diagnostic function	Sensor / wire break, Error signal on output programmable				
Thermocouples		Sensor	Measuring range	Span min.	Measuring error max. of	Temperature influence
		Type J	–200 to +1200 °C	50 K	< 0.3 K / 0.1 %	< 50 ppm/K
		Type K	–200 to +1375 °C	50 K		
	Cold junction compensation	internal, external, uncompensated				
	Error of Cold junction	< 1.5 K				
	Diagnostic function	Sensor / wire break, Error signal on output programmable				

Output	**Current**		**Voltage**	
Output signal	**0 to 20 mA**	4 to 20 mA	0 to 5 V	0 to 10 V
Load	≤ 12 V	(600 Ω @ 20 mA)	≤ 5 mA	(2 kΩ @ 10 V)
Offset	< 20 µA		< 10 mV	
Linear transfer range	0 to 102.5 % ; (3.8 to 20.5 mA at Output 4 to 20 mA)			
Error signal	0 % / 110 % of output range, programmable			
Residual ripple	< 10 mV_{rms}			
General data				
Transfer characteristic	Rising / falling linearly			
Transmission error	< 0.1 %			
Temperature coefficient[1)]	<100 ppm/K v. E.			
Measurement rate	4 / s			
Test voltage	2.5 kV, 50 Hz	Input against output against power supply		
Working voltage[2)] (basic insulation)	600 V AC/DC for overvoltage category II and contamination class 2 acc. to EN 61010 part 1			
Protection against electric shocke[2)]	Protective Separation by reinforced insulation acc. to EN 61010 part 1 up to 300 V AC/DC for overvoltage category II and contamination class 2 between input and output and power supply.			
Ambient temperature	Operation	–25 °C to +70 °C	(–13 to +158 °F)	
	Transport and storage	–40 °C to +85 °C	(–40 to +185 °F)	
Power supply	24 V DC	16.8 V to 31.2 V DC,	approx. 0.8 W	
EMC[3)]	EN 61326–1			
Construction	6.2 mm housing, protection type: IP 20			
Weight	approx. 50 g			

1) Average TC in specified operating temperature range

2) As far as practicable the standards and rules mentioned above are considered by development and production of our devices. In addition the assembly rules for our devices are to be considered by installation in other equipment. For applications with high working voltages, take measures to prevent accidental contact and make sure that there is sufficient distance or insulation between adjacent situated devices.

3) Minor deviations possible during interference

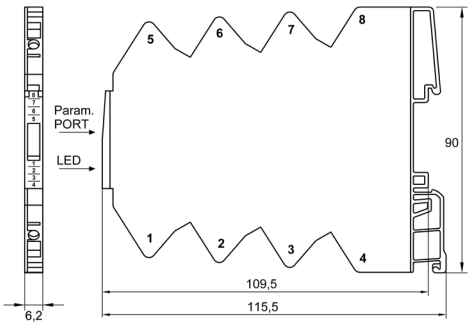
Boldface: Factory setting: Input Pt100, 0 to 100 °C, 4-wire, Output 0 to 20 mA, transfer characteristic rising, error signal 22 mA

Product line

Device	**Order No.**
Temperature Transmitter	D62T 45300
Accessory	
DRAGOset USB Programming Cable and Software	DZU 1201
Cross connector 8-poles (2 pieces, red/blue) for looping through the power supply for up to 8 units	DZU 1205

Subject to change!

Dimensions



Terminal assignments

Screw terminals
Wire cross-section max. 1.5 mm²

1	Input	5	Output +
2	Input	6	Output –
3	Input	7	Power +
4	Input	8	Power –