

6mm

# Universal Transmitter D62T 46000

for Pt, Ni, KTY and TC Standard Sensors,  
mV- and potentiometer measuring, programmable via USB

With the programmable Universal Transmitter D62T 46000 DRAGO is extending its offer on high functional and high reliable components of the interface technique.

The Universal Transmitter D62T 46000 converts the sensor signal on input to temperature linear standard signal 0/4 to 20 mA, 0/2 to 10 V, 0/2 to 10 mA or 0/1 to 5 V. With the mV and potentiometer input ranges further signals can be transformed into standard signals. Due to the easy configuration via USB interface the Transmitter is suitable for flexible use. The high reliability and the protective separation are further features, which ensure a safe system operation.

The loop check function on the service button simulates an output signal for testing and adjusting the complete output loop.

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.

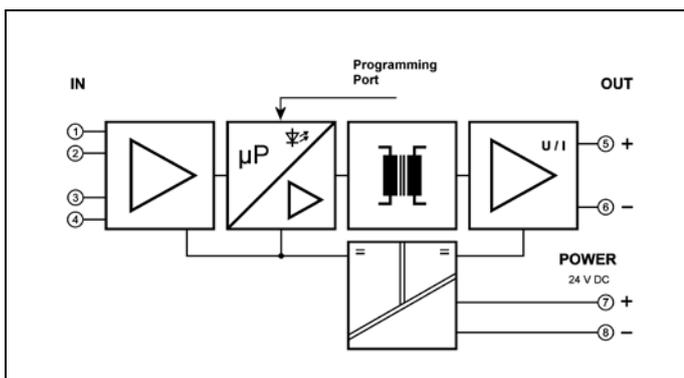
The optimized efficiency of the D62T 46000 power pack contributes a significant reduction of the unit's own heat generation. This is reflected in extremely high MTBF, which means highest reliability and long term stability. The status of power supply and sensor connection will be displayed by a LED on front.

- **Universal Measuring Input**  
for Platin, Nickel, KTY and Thermocouple Standard Sensors, Input ranges for mV- and Potentiometer Signals
- **Easy configurable via USB**  
Sensor type, measuring range, sensor connection, characteristic und output signal easy programmable via USB interface - without supply power -
- **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**

**5 Years Warranty**  
Defects occurring within 5 years from delivery are remedied free of charge at our plant (carriage and insurance paid by sender).



Block Diagram



Input						
<b>Resistance Thermometer</b>		Sensor	Measuring range	Span min.	Measuring error max. of	Temperature influence
	Pt	Pt100, Pt200, Pt500, Pt1000	-200 °C to +850 °C	50 K	< 0.1 K / 0.05 %	< 50 ppm/K
	Ni	Ni100, Ni200, Ni500, Ni1000	-50 °C to +180 °C	50 K		
	Sensor connection		4-wire, 3-wire, 2-wire			
	cable resistance		< 100 Ω per wire, manual compensation for 2-wire connection programmable			
	Sensor current		0.2 mA			
	Diagnostic function		Sensor / wire break, Error signal on output programmable			
<b>Semiconductor Sensors</b>		Sensortypes	Measuring range	min. Span		
			KTY, 66 different types	-50 °C to +300 °C	50 K	
	Measuring error max.		< 0.1 K / 0.05 %		Temperature influence < 50 ppm/K	
	Sensor connection		4-wire, 3-wire, 2-wire			
	cable resistance		< 100 Ω per wire, manual compensation for 2-wire connection programmable			
	Sensor current		0.2 mA			
	Diagnostic function		Sensor / wire break, Error signal on output programmable			
<b>Thermocouples</b>		Sensor	Span min.	Measuring error max. of	Temperature influence	
			Types B, E, J, K, L, N, R, S, T, U	50 K	< 0.3 K / 0.1 %	< 50 ppm/K
			W5Re W26Re W3Re W25Re	50 K		
	Cold junction compensation		internal, external, uncompensated, manual setting, Error of Cold junction internal < 1.5 K			
	Diagnostic function		Sensor / wire break, Error signal on output programmable			
<b>mV Input</b>		Measuring range		Span min.	Measuring error max. of	Temperature influence
			±125 mV -125 mV to +125 mV	50 mV	< 0.1 %	< 50 ppm/K
			±1000 mV -1000 mV to +1000 mV	50 mV		
	Diagnostic function		Sensor / wire break, Error signal on output programmable			
<b>Potentiometer Input</b>		Type	Measuring range	Span min.	Measuring error max. of	Temperature influence
	potentiometer resistance		200 Ω to 50 kΩ	0 % to 100 %	50 %	< 0.1 %
	Diagnostic function		Sensor / wire break, Error signal on output programmable			< 50 ppm/K
<b>Output</b>		<b>Current</b>		<b>Voltage</b>		
	Output signal		0 to 20 mA, 4 to 20 mA, 0 to 10 mA, 2 to 10 mA		0 to 5 V, 0 to 10 V, 1 to 5 V, 2 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 <sub>rms</sub>			
<b>General data</b>						
	Transfer characteristic		Rising / falling linearly			
	Transmission error		< 0.1 %			
	Temperature coefficient <sup>1)</sup>		< 100 ppm/K			
	Measurement rate		4 / s			
	Test voltage		2.5 kV, 50 Hz Input against output against power supply			
	Working voltage <sup>2)</sup> (basic insulation)		600 V AC/DC for overvoltage category II and contamination class 2 acc. to EN 61010 part 1			
	Protection against electric shock <sup>2)</sup>		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 <sup>3)</sup>		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 equipments. 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**

Item	Order No.
Universal Transmitter	D62T 46000
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