

UST150

Analog Signal Converter USERS' GUIDE



DESCRIPTION of the DEVICE

UST150 Model devices are used to convert analog signals that are created in any environment to standart analog signals isolated from input.

These devices are microcontroller based and can be configured easily by using SBA100 USB/UART Converter. All inputs and outputs are isolated.

SAFETY PRECAUTIONS

- Before using the device, please read the warnings below and this guide carefully. The accidents or damages resulting from not following the warnings included in this guide are under user's responsibility.
- This device is intended to be used by qualified personnel in industrial environments, do not use in houselike environments.
- Do not use the device at places where corrosive, flammable and explosive gases exist. Contact points may create electrical discharge and this may cause explosion or fire.
- Do not allow metal fragments or lead wire scraps or liquid matters to fall inside this device. Otherwise fire or electrical shock may happen.
- Take the necessary precautions in order to prevent accidents and damages that may result in case the device gets faulty.
- There is no fuse or switch that brings the device in power down state, these should be added to the system by the user.
- Sensor and signalling cables should not be routed close to the power cables or inductive load cables.
- Before connecting the device, supply voltage must be checked if it is suitable according to the product code.
- Do not power up the device before the connections related with the device are performed in accordance with the connection diagram. While the device is powered, do not touch on the terminals.
- Configuration settings at factory out should be changed according to the user's preferences. The accidents and damages resulting from incorrect configuration settings are under users' responsibility.
- Lifetime of the device is 10 years.
- Never disassemble, repair and modify the device. These should be carried out by

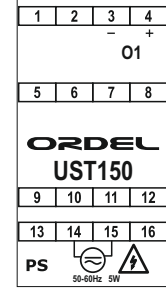
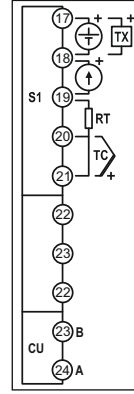
PRODUCT CODE

UST150- /
 RS / O / U

Power Supply: _____
0 = 100-240Vac/dc (Universal)
1 = 24Vac/dc
Analog Output: _____
1 = 0/4-20mA Current Output
2 = 0/2-10V Voltage Output
RS 485 MODBUS-RTU _____
0 = No RS 485
1 = Available

Manufacturer and Technical Service :
ORDEL Ltd. Şti. Uzayçağı Cad. 1252. Sok. No:12 OSTİM/ANKARA

CONNECTION DIAGRAM



TECHNICAL SPECIFICATIONS

Power Supply	100-240Vac/dc: +%10 -%15	24Vac/dc: +%10 -%20
Power	3W,5VA	
Universal Analog Input(S1)	Termocouple (B,E,J,K,L,N,R,S,T,U), Resistance Thermometer (Pt100),2 Wire Transmitter, Current(0/4-20mA), Voltage (0-50mV, 0/2-10V)	
Transmitter Voltage	24Vdc (Isc = 30mA)	
Analog Input Impedance	Termocouple: 10M Ω , Current: 10 Ω , Voltage: 1M Ω	
Analog Output (O1)	Current: 0/4-20mA, 20-4/0mA (RL \leq 500 Ω) Voltage: 0/2-10V, 10-2/0V (RL \geq 1M Ω)	
Memory	100 yil, 100.000 renewals	
Doğruluk	+/- %0,2	
Sampling Time	100ms	
Environment Temperature	Operation: -10...+55C, Storage: -20...+65C	
Protection	IP20	
Dimensions	Width: 25 mm, Height: 91 mm, Depth: 113 mm	
Weight	134 gr	

SENSOR TYPES

Sensor Type	Standart	Temperature	
		(°C)	(°F)
Type B Thermocouple	IEC584-1	60, 1820	140, 3308
Type E Thermocouple	IEC584-1	-200, 840	-328, 1544
Type J Thermocouple	IEC584-1	-200, 1120	-328, 1562
Type K Thermocouple	IEC584-1	-200, 1360	-328, 2480
Type L Thermocouple	DIN43710	-200, 900	-328, 1652
Type N Thermocouple	IEC584-1	-200, 1300	-328, 2372
Type R Thermocouple	IEC584-1	-40, 1760	104, 3200
Type S Thermocouple	IEC584-1	-40, 1760	104, 3200
Type T Thermocouple	IEC584-1	-200, 400	-328, 752
Type U Thermocouple	DIN43710	-200, 600	-328, 1112
Pt100 Resistance Thermometer	IEC751	-200, 840	-328, 1544

COMMUNICATION ADDRESSES

REGISTER Type Parameters (REGISTERS)

Adres	Açıklama	Ayar Aralığı	Çarpan	Birim	Yazma İzni
0	Decimal Point (DP)	0 3	1		Yok
1	Process Value	-1999 9999	10 ⁿ DP	EU	Yok
41	Sensor type	0 15	1		
42	Sensor measurement below limit	-1999 9999	1		
43	Sensor measurement above limit	-1999 9999	1		
44	Sensor connection broken	0 1	1		
59	Analog output typei(O1)	0 7	1		
60	Analog output below limit value	-1999 9999	1		
61	Analog output above limit value	-1999 9999	1		

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