

# UST200

## Analog Signal Converter and Arithmetic Processor USER'S GUIDE



### DESCRIPTION of the DEVICE

UST200 Model devices are used to convert analog signals that are created in any environment to standard analog signals isolated from input. There are 2 analog inputs and 2 analog outputs. Arithmetic calculations between 2 inputs is also possible.

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

### SAFETY PRECAUTIONS

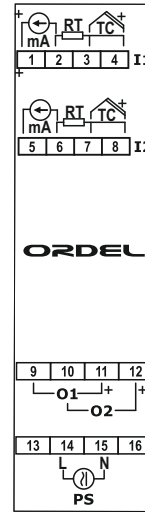
Before using the device, please read the warnings below and this guide carefully. The accidents or damages resulting from not following the warnings included in this guide are under user's responsibility.

- 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 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 user's responsibility.
- Lifetime of the device is 10 years.
- Never disassemble, repair and modify the device. These should be carried out by authorized service.

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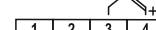
# ORDEL

### CONNECTION DIAGRAM

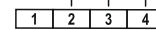


#### I1 and I2 Sensor Connections

TC Input (B,E,J,K,L,N,R,S,T,U)



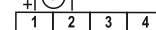
RT Input (3 Wires)



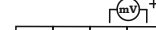
RT Input (2 Wires)



Current Input (mA) \*Optional



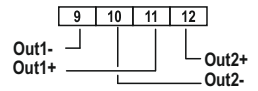
Voltage Input (mV)



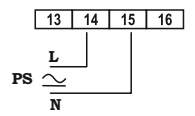
Voltage Input (V) \*Optional



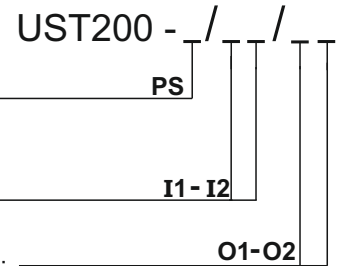
#### Output Connections



#### Feeding Connection



### PRODUCT CODE



Supply Voltage: \_\_\_\_\_

0 = 100-240Vac/dc (Universal)  
1 = 24Vac/dc

I1-I2 Input Type : \_\_\_\_\_

0 = TC, RT, mV, mA  
1 = TC, RT, mV, V

O1-O2 Analog Output Modules : \_\_\_\_\_

1 = 0/4-20mA Current Output

2 = 0/2-10V Voltage Output

### TECHNICAL SPECIFICATIONS

Power Supply	100-240Vac/dc: +%10 -%15	24Vac/dc: +%10 -%20
Power	2W,3VA	
Universal Analog Input( S1 )	Thermocouple = B,E,J,K,L,N,R,S,T,U Resistance Thermometer = Pt-100 Current = 0/4-20mA Voltage= 0-50mV, 0-10V	
Analog Input Impedance	Thermocouple: 10MΩ, Current: 10Ω	
Analog Output ( O1 )	Current: 0/4-20mA, 20-4/0mA ( RL ≤ 500Ω ) Voltage: 0/2-10V, 10-2/0V ( RL ≥ 1MΩ )	
Memory	10 years, 100.000 renewals	
Accuracy	+/- %0,2	
Sampling Time	400ms	
Environment Temperature	Operation: -10...+55C, Storage: -20...+65C	
Dimensions	Width: 25 mm, Height: 91 mm, Depth: 113 mm	
Weight	134 gr	

Sensor Type	Standard	Min.	Max.
Type-T ( Cu-Const )	IEC60584	-200 °C	300 °C
Type-U ( Cu-Const )	IEC60584	-200 °C	600 °C
Type-J ( Fe-Const )	IEC60584	-200 °C	800 °C
Type-L ( Fe-Const )	IEC60584	-200 °C	900 °C
Type-K ( NiCr-Ni )	IEC60584	-200 °C	1200 °C
Type-E ( Cr-Const )	IEC60584	-200 °C	1200 °C
Type-N ( Nicrosil-Nisil )	IEC60584	0 °C	1200 °C
Type-S ( Pt%10Rh-Pt )	IEC60584	0 °C	1500 °C
Type-R ( Pt%13Rh-Pt )	IEC60584	0 °C	1600 °C
Type-B ( Pt%18Rh-Pt )	IEC60584	0 °C	1800 °C
Pt-100	DIN 43760	-200 °C	850 °C
0 / 4-20 mA		0 mA	20 mA
0 / 2-10 VDC		0 VDC	10 VDC

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