

PI100

BIG Prosess Display USER GUIDE's



DEVICE DESCRIPTION

The PI100 model devices are devices that enable the remote monitoring of various sensor signals used in industrial environments. They have one universal analog input, one analog output module and one RS 485 MODBUS RTU communication module.

These devices are microcontroller based and are easily configured on the computer with the SBA200 USB / RS485 Converter.

All inputs and outputs are isolated from the network and from each other.

SAFETY PRECAUTIONS

Before using the device, please read the warnings below and this guide carefully.

The accidents and damages resulting from not following the warnings included in this guide are under user's responsibility.

Take the necessary precautions in order to prevent accidents and damages that may result in case the device gets faulty.

Do not use this device in environments where flammable or explosive gases exist.

Do not allow metal fragments or lead wire scraps or liquid matters to fall inside this device.

Do not touch the terminals while the device is energized (power on)

Device will be out of guarantee when it gets faulty resulted from misusages.

Do not power up the device before the connections related with the device are performed in accordance with connection diagram.

PRODUCT CODE

PI100 - TT / TT

Supply Voltage : (PS)
0 = 100-240Vac (Universal)
1 = 24Vac/dc

Communication Unit Output Module : (LU)
0 = N/A
3 = RS485 Communication Unit

Analog Output Module : (O1)
0 = N/A
1 = 0/4-20mA Current Output
2 = 0/2-10V Voltage Output

PT-100 Temperature Sensor : (OU)
0 = N/A
1 = Available

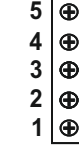
Technical Service : ORDEL Ltd. Şti. Uzuncağı Cad. 1252. Sok. No:12 OSTİM/ANKARA
Tel:+90 312 385 70 96 (PBX) Fax: +90 312 385 70 78

ORDEL

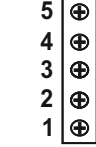
DRAWINGS



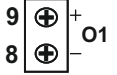
TC Input
(B,E,J,K,L,N,R,S,T,U)



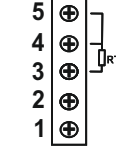
Current Input (mA)



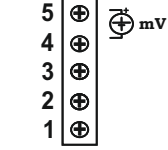
Analog Output
Module (O1)



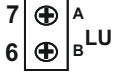
RT Input (3 Wires)



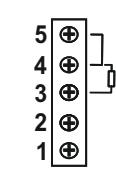
Voltage Input (mV)



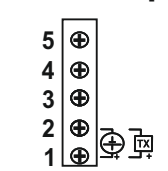
RS 485
Module



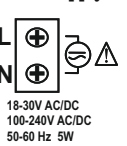
RT Input (2 Wires)



Voltage Input(V) or
Transmitter Output(TX)



Power Supply



TECHNICAL SPECIFICATIONS

Besleme Gerilimi	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 (I _{sc} = 30mA)	
Analog Input Impedance	Termocouple: 10MΩ, Current: 10Ω, Voltage: 1MΩ	
Analog Output (O1)	Current: 0/4-20mA, 20-4/0mA (R _L ≤ 500Ω)	
	Voltage: 0/2-10V, 10-2/0V (R _L ≥ 1MΩ)	
Memory	100 yıl, 100.000 renewals	
Doğruluk	+/- %0,2	
Sampling Time	100ms	
Environment Temperature	Operation: -10...+55C, Storage: -20...+65C	
Protection	IP20	
Dimensions	Width: 540 mm, Height: 150 mm, Depth: 30 mm	
Weight	1800 gr	

SENSOR TYPES

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

COMMUNICATION ADDRESSES

Address	Description	Unit	Mul.	Setting
0	Decimal Point (DP)			No
1	Prosess Value	EU	10^DP	No
Bit Type Parameters Address				
Address	Setting	Description(1 / 0)		
0	No	Process value is below the sensor scale (Yes / No)		
1	No	Process value is above the sensor scale (Yes / No)		
2	No	Sensor connection is broken error. (Var / Yok)		
3	No	Prosess Measurement Error (Yes / No)		

www.ordel.com.tr