

Programmable Process Indicator (Large Indicator)



PI100

Height of Digit = 100 mm

Device Features

- 4 Digit Numeric Display
- Height of Digit 100 mm
- 1 pcs Transmitter Supply Output (24VDC)
- 1 pcs Universal Sensor Input (TC, RT, mA, mV, V)
- 1 pcs Analog Output (0/4-20mA, 0/2-10V)
- 2 pcs Relay or Logic Output (24V)
- 1 pcs RS485 Communication Unit
- 100-240V AC/DC Universal or 24V AC/DC Supply Voltage
- Isolation between Input/Output modules

- Sensor Error Detection
- 100ms Sampling
- Standard MODBUS RTU communication protocol
- Configuration via Computer

PI100 devices are devices designed to measure temperature, pressure, speed, level, humidity, current, voltage, resistance and other physical units of many process variables and to read this measurement from long distances with a 100 mm digit height. They are fully modular and each module can be configured as self-contained devices. It is used in Food, Plastic, Iron and Steel, Chemistry, Metallurgy, Cement, Ceramics, Petro-Chemistry, Refineries, Glass and other industries. Process value can be transferred to a scale system with Analog Output and RS485 Modbus modules. They are ergonomic devices whose compliance with international standards, reliability and ease of use have been ensured at the design stage.

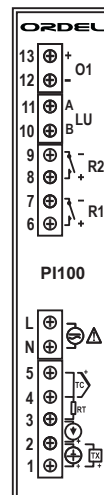
Input Types

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

Technical Specifications

Power Supply (PS)	100-240 Vac/dc +10%-15% 24 Vac/dc +10%-20%
Power Consumption	6W, 7VA
Universal Sensor Input (S1)	Thermocouple = B , E, J, K, L, N, R, S, T, U Two Wired Transmitter = 4-20mA Resistance Thermometer = Pt-100 Current = 0/4-20mA Voltage = 0/2-10V
Transmitter Supply (TX)	24Vdc (I _{sc} = 30mA)
Analog Input Impedance	Thermocouple, mV = 10MΩ Current = 10Ω Voltage = 1MΩ
Analog Output (O1)	Current = 0/4-20mA (R _L ≥500Ω) Voltage = 0/2-10V (R _L ≥1MΩ)
Memory	100 Years, 100.000 Renewals
Accuracy	+/- 0,2%
Sampling Time	100 ms
Environment Temperature	Working = -10...+55°C Storage = -20...+65°C
Dimensions	Dimensions vary depending on the type of device. Contact the company.
Weight	Weight of the device varies depending on the type of device. Contact the company.

Modular Structure and Connection Diagram



Module	Description
S1	Universal sensor input module (the sensor used to measure process value should be connected to the terminals with appropriate symbol on this module).
LU	This module is RS485 communication unit (The content of this module is determined by the product code, function is selected from the configuration page).
O1	Analog output (The content of this module is determined by the product code, function is selected from the configuration page).
R1, R2,	Relay output modules (The content of this module is determined by the product code, function is selected from the configuration page).
L-N	Supply voltage input (Supply voltage is determined by product code).

Product Code

PI100 - / / / / /

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

Communication Module : _____ LU
 0 = N/A
 3 = RS485 (MODBUS) Communication Module

Analog Output Module : _____ O1
 0 = N/A
 1 = 0/4-20mA Current Output
 2 = 0/2-10Vdc Voltage Output

Optional Pt-100 Temperature Sensor : _____ OU
 0 = N/A
 1 = Available

Indicator Type : _____ ST
 1 = Single Sided
 2 = Double Sided

Number of Indicator : _____ SS
 1 = Single
 2 = Binary
 3 = Triple
 4 = Quadruple

Button Function : _____ KF
 0 = N/A
 1 = Yes (On Keys)
 2 = Yes (Keys 3m Cable)

R1, R2 Output Modules : _____ R
 0 = N/A
 1 = NO Contact
 2 = 24V Logic Output (for SSR driving)

Note: If there is no key on the device, the operation function of the relays and according to which input they will work must be specified during the order.