

(Large 20 mm high digits)
Display viewing distance up to 10m

- Universal input
- 4-digit LED 20mm height
- Programmable measuring range
- Programmable hysteresis
- Password protected
- Root, square or 20 point linearization
- Transmitter supply 24VDC
- 2 or 4 programmable alarm relays
- Output 0-20 or 4-20mA (option)
- Signal peak detection
- Programmable digital filter
- RS485 MODBUS RTU



DESCRIPTION

BDI94U meter is equipped with one universal input, type: 0/4-20mA, 0-10V, 0-150 mV, Pt 100/500/1000 or TC (K, S, J,T, N, R, B, E). During the measurement process only one kind of input is available. Temperature of cold ends is compensated automatically. RTD and TC inputs are fully linearised. The device with current or voltage input operates in the following modes: linear, root, square and user defined (max. 20 points). Result is shown on 4-digit LED display. The device is equipped with RS-485/Modbus RTU communication interface and sensor supply output. 2 or 4 relay (or OC) outputs make it possible to adjust the level of the measured signal. These outputs can be controlled according to one or two threshold values. Optionally **BDI94U** with two relays outputs can be equipped with a active current output. The device can be used for controlling and regulation of processes need proportional and threshold control like: temperature processes (heating or cooling), valves controlling or other.

TECHNICAL SPECIFICATIONS

Construction : Panel design to standard 1/8 DIN 96 x 48mm
Wiring : Screw terminals at rear panel
Housing : Noryl-GFN2SE1
Isolation : Input to supply
Indication : Red LED 4-digit height, 20mm

INPUT

Pt-100-500-1000 : -100 – 600°C 2, 3 or 4-wire
Thermocouple K: -200°C ÷ +1370°C, **S**: -50°C ÷ +1768°C
J: -210°C ÷ +1200°C, **T**: -200°C ÷ +400°C, **N**: -200°C ÷ +1300°C, **R**: -50°C ÷ +1768°C, **B**: +250°C ÷ +1820°C,
E: -200°C ÷ +1000°C
Voltage : 0-5, 1-5, 0-10 or 2–10VDC
 0-60, 0-75, 0-100 or 0-150mV
Current : 0-20, 4-20mA
Indication : -999 till +9999

OUTPUT

Current : 0/4-20mA load 700 ohm
Relay : 2 or 4
Contacts : 250VAC, 1A
Relay : 10⁷ operations
Transistor : Open collector 30V/30mA
Communication : RS485 MODBUS RTU isolated
Sensor supply : 24VDC/100mA

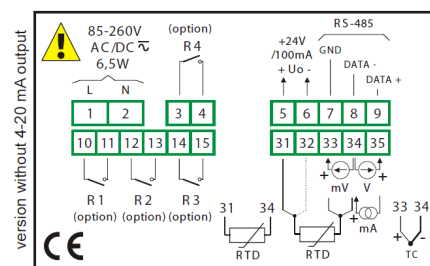
INSTALLATION

Supply : 85 to 260VAC/DC, 16 to 35VAC or 19 to 50VDC
Ambient temp : -0 to +50°C, RH 0 to 85%
Storage temp : -10 to +70°C
Mounting : Panel with bracket
Protection class : IP65 front, IP20 rear
Dimension : B96 x H48 x D100mm
Weight : 400g

PERFORMANCE

Accuracy error : < ±0.1% FS
Display : Red LED 4-digit height, 20
Power consumption : 4.5VA
Isolation : Input to output to supply (3-way) 2300VDC/AC peak
EMC : EN 50081-1, EN 50082-2, EN 61010-1 EN 61010-1/A2:1999

CONNECTION



ORDER INFORMATION

BDI94U-1JXX-1-X-XX1 — **options:**
00 : no options
01 : IP 65 frame
power supply:
3 : 24V AC/DC
4 : 85V - 260V AC/DC
type of outputs:
0 : no output
1 : REL (for 2 and 4 outputs)
2 : OC (for 2 and 4 outputs)
3 : 2 x REL + current output
4 : 2 x OC + current output