

# SIGNAL ISOLATOR/ CONVERTOR



## TECHNICAL SPECIFICATION

### INPUT

Thermocouple	: J, K
RTD	: PT100Ω
DC Voltage	: 75 mV / 200 mV / 1V / 10V
DC Current	: 0-20mA / 4-20mA
Resistance	: 500Ω, 1kΩ, 2kΩ, 5kΩ, 10kΩ

### OUTPUT

Number of outputs	: 1 / 2
Output Types	: Current : 0-20mA, 4-20mA (Load 500Ω max.) Voltage : 0-1V DC, 0-10V DC (Load 1 mA max.)
Input/output Relation	: RTD - Temperature Linearisation included other outputs - output is proportional to input signal linearisation not included
Current Limit	: Maximum current output 22 mA

### ACCURACY

Accuracy	: ±0.5% of span (including repeatability and non linearity)
Temperature effect on accuracy	: ±0.02% of span / °C

### ADJUSTMENTS

Zero, Span	: Multiturn potentiometers are provided for Zero and Span
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### ISOLATION

Isolation between input / output supply	: 2kV AC RMS for 1 minute, 250V AC RMS Continuous
Operating Temperature	: 55°C (Max.)
Humidity	: 5 - 95%Rh non-condensing
Auxiliary Power Supply	: 24 V DC 85-265V AC / DC, 50/60Hz

### CASE AND DIMENSION

Enclosure	: ABS Plastic
Box Dimension	: 70(H) x 100(W) x 110(D) mm (Single Output) 70(H) x 110(W) x 150(D) mm (Dual Output)
Mounting	: DIN Rail



## INDUSTRIAL CONTROLS & DRIVES (INDIA) PVT. LTD.

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# TEMPERATURE/ PROCESS INDICATOR/ CONTROLLER



## FEATURES AND SPECIFICATIONS

### FEATURES

- Microcontroller based design
- Input - J, K, R, S Thermocouple / PT100Ω RTD, mV, mA
- Membrane keypad for settings and calibration
- Control logic - ON/OFF with hysteresis set and time proportional

### OPTIONAL FEATURES

- 4-20mA retransmission output
- RS485 Communication port

### TECHNICAL SPECIFICATION

Type	: ICD Temperature / Process Indicator / Controller
Circuit Design	: Microcontroller used with precision 12 bit fast AD Converter
Input	: 1) Type J, K, R, S Thermocouples 2) PT-100 RTD Sensor 3 wire 3) 4-20mA / 0-1V / 0-5V / 0-10V

### WORKING RANGE & RESOLUTION

Sensor Types	Range	Resolution
J Type	0-500°C	1°C
K Type	0-1200°C	1°C
R & S Type	0-1600°C	0.1°C
PT100Ω	0-199.9°C	0.1°C
mA, mV	0-1999	Programmable 0.1 / 0.01 / 1

### ACCURACY

Sensor Types	Accuracy
J Type	±0.25% OFS + 1LSD
K Type	±0.25% OFS + 1LSD
PT100Ω	±0.25% OFS + 1LSD
mA, mV	±0.1% OFS

CJC for TCs	: Available
Sensor open Indication	: Available
Display	: 4 Digit 0.5" 7 Segment Red LED
Calibration	: Through front keys with digital tuning
Memory	: EERAM 10 years life expectancy
Sensor Linearisation	: Available for RTD & TC Sensor

### CONTROL ACTION

No. of Setpoints	: Two
Control Action	: ON / OFF and time proportional
Control band	: 1-5°C
Control type	: Forward/Reverse
No. of Relays	: Two for set 1 & 2. It can be used for control and alarm or two level control.
Relay Output	: 1 C/o Potential free Contact for each point
Contact Rating	: 5A @ 240V AC
Optional Features	: 1) 4-20mA retransmission output 2) RS485 Serial port communication output with MODBUS RTU Protocol
Auxiliary Power Supply	: 90 - 270 V AC
Operating Temperature	: 55°C (Max.)
Humidity	: 5-95%Rh non-condensing

### CASE AND DIMENSIONS

Enclosure	: ABS Plastic
Dimension	: 96(H) x 96(W) x 120(D) mm
Cutout	: 88(H) x 88(W) mm
Mounting	: Panel



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Note: Specifications are subject to change without prior notice due to continuous improvement in product development.