



- **3 1/2 Digit 7 Segment LED Display**
- **Accepts J,K,S,T,E,N,R,Pt100, 50mV,10V or 4-20mA**
- **Built-in Linearization for Thermocouple (optional)**
- **Cold junction compensation for Thermocouple Input**
- **THREE wire lead length compensation for RTD Inputs**
- **Retransmission Output**
- **Transmitted Power Supply(optional)**
- **Rugged in construction**

### **APPLICATION**

The 3 1/2 digit process Indicator / Controller is useful in the process Industries to control, monitor and display the process parameters. The retransmission output (0 –2 V) is used in the field to drive recorder or to provide an input for an additional controller like DCS / display. Optionally a 24 V transmitter power supply is provided for field requirements.

### **DESCRIPTION**

The input may be in the form mV or resistance directly from transducers or milliamps or DC Voltage. The process value is displayed on a 3<sub>1/2</sub> digit, 7 segments LED display. Control is provided in the form of two relays, one for alarm and other for trip. The set points controlling these relays are adjustable by means of two trim pots accessible from the front panel of the instrument. The relays are normally energized to ensure failsafe operation of the instrument. Cold junction compensation is provided for Thermocouple inputs and a 3 wire lead resistor is provided for RTD inputs. Two LEDs are provided to serve as an indication of the status of the relays. The instrument detects an input sensor open condition, which is displayed by flashing Alarm LED. Two push buttons are provided on the front panel for reading/setting of set point values. A buffered 0-2V output is provided which is proportional to the input. Zero and Span adjustments are available for calibration

## **CALIBRATION**

- a. Connect DC calibrator to the approximate input terminals
- b. Set the input at 10% of total span and adjust zero trim pot to read the specified output value
- c. Now set the input at 90% of span and adjust span trim pot to read the specified output value
- d. Repeat steps b & c for better accuracy

## **MOUNTING**

The Digital process indicator is housed in DIN enclosure. Clamps supplied along with the instruments do fixing.

## **OPTIONS**

- 1) Built –in linearization for Thermocouple inputs (Accuracy + 0.3 %, FSD +1 Digit)
- 2) Built –in transmitter power supply of 24 V DC
- 3) 4- 20 mA retransmission output (Max. 400 Ohms output load drive)

## **SPECIFICATIONS**

### **INPUTS**

Number of channels	:	Single Channel with or without settable alarms
Input Type	:	V, mV, mA, RTD, Thermocouple or Potentiometer
Input Range	:	0-1999 (in any engineering unit)

### **OUTPUTS**

Retransmission Output	:	0 – 2V
Relay Outputs	:	Two relays corresponding to two Set Points
Relay configuration	:	Hi & V. Hi or Hi & Lo or Lo & V.Lo
Type of Relay Contact	:	One change over, potential free
Relay Contact Rating	:	3A at 220VAC or 24VDC

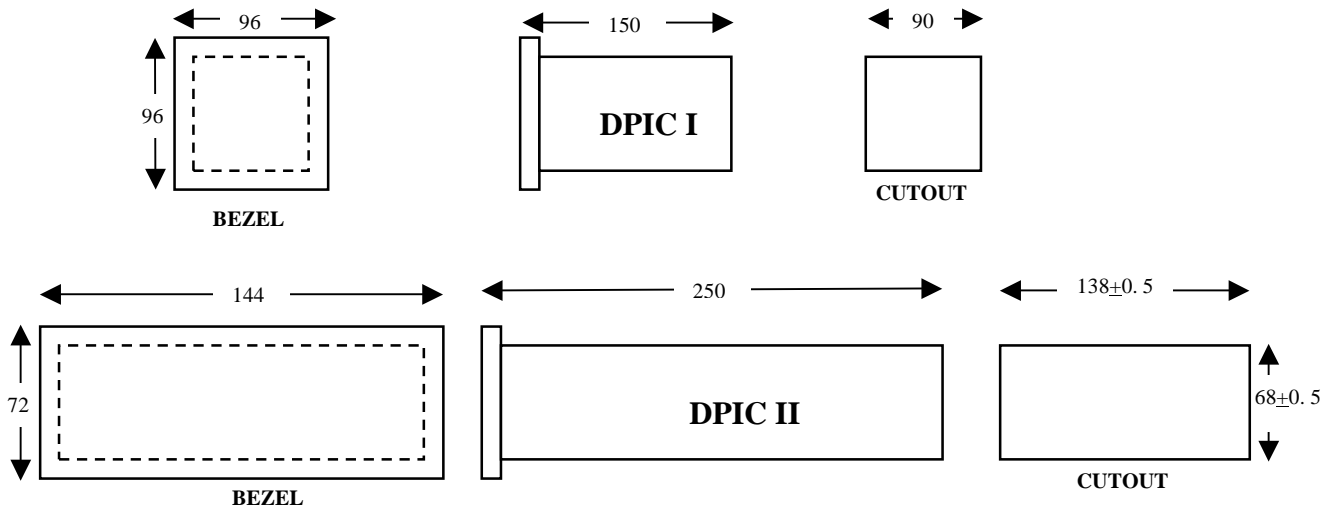
### **ACCURACY**

Indicator accuracy	:	$\pm 0.5\%$ of span $\pm 1$ Digit for current/voltage input $\pm 1\%$ or span $\pm 1$ Digit for temperature input
Alarm Accuracy	:	$\pm 1\%$ of span $\pm 1$ Digit
Hysteresis	:	1.5% FS $\pm 1$ Digit

### **DISPLAY**

Type	:	3 ½ digit, 7 segment red LED display of 12.5mm size is provided for set point and parameter indication
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Set point Adjustment : Two Trim pots provided for Alarm & Trip Set points  
 Response Time : 250 ms, Typical  
 Open Circuit Indication (Sensor Break) : Alarm LED flash  
 Power Supply : 110V/220V/240V AC  $\pm 10\%$  - 50Hz.  
 Power Consumption : 4 VA  
 Operating temperature range : 0 – 50 Deg. Celsius  
 Humidity : 4 – 95% RH,( non-condensing)  
 Bezel Dimension : 72 X 144 mm  
 Panel Cutout : 68 X 138 mm  $\pm 0.5$  mm



**ORDERING INFORMATION**

Specify

1. Model - Specify
2. Power Supply
3. Input type & Range
4. Options

**MANUFACTURED BY:**

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