



RISH Eine⁺ has been designed for industrial applications, which frequently require precise and on-site adjustment of the display range.

Applications:

- ▶ Distribution and Control Panels
- ▶ Electrical load monitoring
- ▶ In Laboratories
- ▶ In Industrial automation

Product Features:

Low Back Depth:(For 96x96 model)

- ▶ The instrument has very low back depth (behind the panel) of less than 40 mm.

Rescalable Display range:

- ▶ The meter is completely programmable and user can easily scale the values as per his requirements on-field. Setting for '-ve' sign and decimal point position is also provided.

Function keys:

- ▶ Using 2 function keys it becomes easy and convenient for user to program the meter without any difficulty.

Bent Characteristics:

- ▶ The meter supports bent characteristics. Hence user can configure the meter as per requirement.

Power Factor Display:

- ▶ The meter can be configured to display power factor also.

Ambient Temperature Indication:

- ▶ The meter gives an accurate indication of the ambient temperature in °C and °F.

Auxillary Supply:

- ▶ The Auxillary supply ranges 40-300V AC-DC and 20-60V DC / 20-40V AC(For 96x96 model), are supported.

4 Full digits Ultra Bright LED display:

- ▶ 14mm full range display possible of 4 digits having maximum count - 9999.

Wide Input Range:

- ▶ Wide range of voltages and currents to choose from.

Enclosure Protection for dust and water:

- ▶ Conforms to IP 50 (front face) as per IEC 60529.

Compliance to International Safety standards:

- ▶ Compliance to International Safety standard IEC 61010-1- 2010.

EMC Compatibility:

- ▶ Compliance to International standard IEC 61326 Class B.



Measure



Control

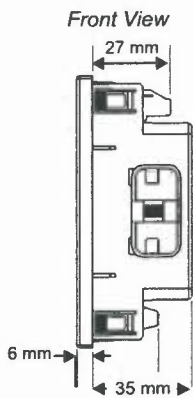
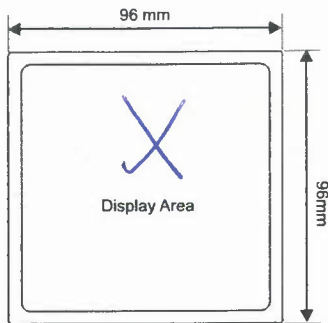


Record

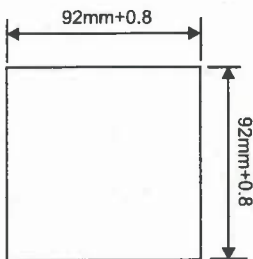


Analyze

Dimensional Details:



Side View



Panel Cutout

Technical Specifications:

Measuring Ranges:

Model	RISH Eine ⁺ Voltage
Input mV ranges	-75...0...75mV, -150...0...150mV
Input Voltage range	-5...0...5V, -10...0...10V, 0...500V, 0...1000V
Max continuous input voltage	120% of Nominal value

Model	RISH Eine ⁺ Current
Input Current ranges	-10...0...10mA, -20...0...20mA, 4...20mA, -1...0...1A, -5...0...5A
Max continuous input current	120% of Nominal value

Accuracy:

RISH Eine ⁺ Voltage* (Input current < 300uA) for V/mV	<0.5% of Display End value ±1 digit
RISH Eine ⁺ Current* (Voltage drop < 600mV) for A/mA	<0.5% of Display End value ±1 digit
Ambient Temperature	±3 °C

Influence of Variations:

Temperature coefficient	0.05% / °C, plus
Zero point drift	0.025% / °C

Display:

Type	1 line 4-digit LED display
Display Count Setting	-9999...-10 or +10...+9999 counts
Digit Height	14mm
Decimal point position	Configurable
Negative Display indication	'-
Overload Indication	" - oL -" (above 125% of nominal value)

*Note: Refer formula for accuracy of bent characteristics.

Factor C (The highest value applies if calculated C is less than 1, then C=1 applies)

Linear characteristics:

$$C = \frac{1 - \frac{Y_0}{Y_2}}{1 - \frac{X_0}{X_2}} \text{ or } C=1$$

Bent characteristics:

$$\text{For } X_0 \leq X \leq X_1 \quad C = \frac{Y_1 - Y_0}{X_1 - X_0} \cdot \frac{X_2}{Y_2} \text{ or } C=1$$

$$\text{For } X_1 \leq X \leq X_2 \quad C = \frac{1 - \frac{Y_1}{Y_2}}{1 - \frac{X_1}{X_2}} \text{ or } C=1$$

X0 = Start value of input, Y0 = Start value of display, X1 = Elbow value of input, Y1 = Elbow value of display

X2 = End value of input, Y2 = End value of display



Measure



Control



Record



Analyze