



# Data Sheet

## RISH EINE NX

1 Ph Ammeter / Voltmeter With Touch Key



Measure



Control



Record



Analyze



Optimize

### Application

The programmable Digital Panel Meter Rish Eine NX have been designed for industrial application ,which frequently require precise and on-site adjustment of the display range. It can be used in industrial automation and for laboratory uses.

### Product Features

#### True RMS measurement

#### Attractive look with two touch keys

#### 3 digit or 4 digit ultra bright 7 Segment LED display

#### Fast & Easy Installation on panel with click fit arrangement

#### Display parameters

Voltage VLN or Current.

#### True RMS Measurement

The instrument measures distorted waveform upto 15<sup>th</sup> harmonic.

#### Front panel keys

Two keys are useful for easy setup navigation and changing setup parameters.

#### Ultra bright LED Display

Voltage DPM has 3 digit 1 line seven segment LED display. Ammeter/Current DPM has 4 digit 1 line seven segment LED display.

#### Enclosure Protection for dust and water

Conforms to IP 50 (for front face) & IP 20 (for back) & as per IEC60529.

#### EMC Compatibilty

Compliance to IEC61326

#### On site programmable CT parameters (For Ammeter)

Current Transformer (CT) primary and secondary is programmable on site through front panel keys.

CT Primary value ranging from 1A to 9999A.

CT Secondary value ranging from 1A/5A.

#### On site programmable PT parameters (For volt DPM)

Potential Transformer (PT) primary and secondary is programmable on site through front panel keys.

PT Primary value ranging from 57.5 VLN to 900 kVLN.

PT Secondary value ranging from 57.5 VLN to 480 VLN.

#### Auxiliary supply

Higher Auxiliary power supply with voltage range 60V-300V AC/DC.



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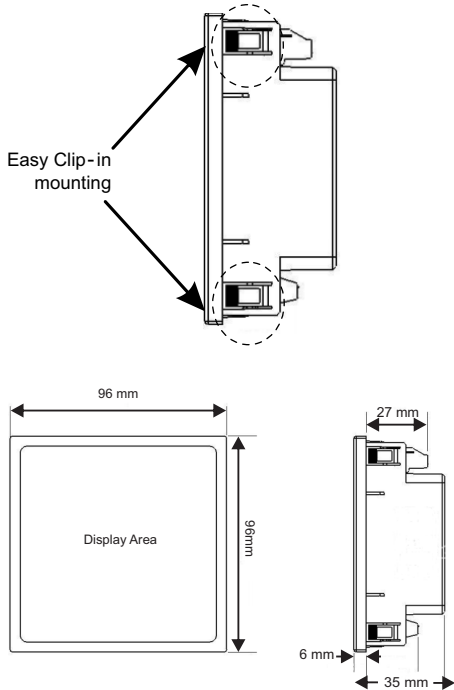


Analyze

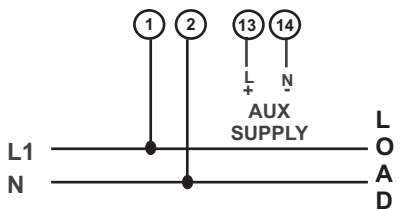


Optimize

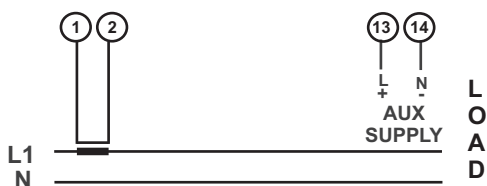
### Dimensions Details



### Electrical Connection



Connection For Voltage DPM



Connection For Ammeter DPM

### Technical Specifications:

#### Operating Measuring Ranges

Voltage Range	10V ..... 519V
Current Range	For 1A(15mA -1.2A) & For 5A(55mA- 6A)
Frequency	45...65 Hz

#### Input Voltage (for Volt DPM)

Full Scale Input voltage (AC RMS)(FS)	480 VLN
Max continuous input voltage	519 VLN. (OL >1.083 X PT Primary)
Input voltage burden	<0.3 VA approx at 230V

#### Input Current (for Ammeter)

Input current.	1A or 5A.
Max continuous input current	120% of CT Primary.(OL >1.21 X CT Primary)
Input current burden	<0.3 VA approx

#### Auxiliary Supply

Higher AC-DC External Aux.	60-300V AC/DC
Frequency range	45 to 65 Hz
VA burden	5 VA Approx

#### Overload Withstand

Voltage	600VLN for 1 second, repeated 10 times at 10 second intervals.
Current	2 x 5A for 1 second, repeated 5 times at 5 second intervals

#### Reference conditions for Accuracy

Reference temperature	23°C ±2°C.
Input waveform	Sinusoidal (distortion factor 0.005)
Input frequency	50 or 60 Hz ±2%
Auxiliary supply voltage	Nominal Value ±1%
Auxiliary supply frequency	Nominal Value ±1%

#### Display update rate

Response time to step input	Less than 1 second
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#### Accuracy

Voltage	± 1.0 % of FS (optional ± 0.5 %)
Current	± 1.0 % of 5A (optional ± 0.5 %)

#### Influence of Variations

Temperature coef fcient :	0.03 % /°C for Voltage
(for range of use (0°C to 55°C)	0.05 % /°C for Current

#### Applicable Standards

EMC	IEC 61326-1 (Table-2)
Safety	IEC 61010-1-2018, Permanently connected use
IP for water & dust	IEC 60529



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### Technical Specifications:

#### Environmental

Operating temperature	0°C to +55°C.
Storage temperature	-25°C to +70°C.
Relative humidity	0... 90% non condensing.
Warm up time	Minimum 3 minute.
Shock	Half sine wave, Peak acceleration 30gn (300 m/s <sup>2</sup> )
Vibration	10... 55 Hz, 0.15mm amplitude

#### Enclosure

Front	IP 50
Back	IP 20

#### Dimensions

Housing dimensions	96 x 96 x 40 mm
Panel cut-out	92.8 x 92.8 mm

#### Safety

Pollution degree	2
Installation category	III
High Voltage Test	2 kV AC, 50Hz for 1 minute between

### Ordering Information :

Ordering Information	ED99-	G	1	X	XX	H	X	X	X	0000
Product Type	AC DPM - 1 Phase - RISH Eine NX									
Size	96 X 96mm									
System Type	1 Phase									
Input Type	AC Voltmeter			V						
	AC Ammeter			A						
Input Range (Programmable)	57.5-480VLN 50/60Hz (AC Voltmeter)				8A					
	1/5A 50/60Hz (AC Ammeter)				8D					
Auxiliary Supply	60-300V AC/DC									
Accuracy	Class 1						1			
	Class 0.5						5			
IP Protection	Standard - IP50								0	
	Optional - IP54 (On request-Chargeable)								2	
Test certificate	Not Required									0
	Required (On request-Chargeable)									1

#### Order Code Example : ED99-G1A8DH1010000

RISH Eine NX-1 Phase, Size 96X96mm, Input 1/5A AC, Aux supply 60-300V AC/DC, Accuracy 1.0, with standard IP50, with Test certificate



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