



Industrial & Electrical Components

Single-phase Digital Power Meter

Part No.

NRM01

Description

- ◆ Measuring 1-phase current, voltage, active power, reactive power, power factor, frequency etc.
- ◆ With RS485 communication interface and Modbus communication protocol.
- ◆ Convert energy signal to standard DC analog signal output, or relay alarm output.
- ◆ Outline size: 120X120, 96X96, 80X80 and 72X72mm etc.
- ◆ Used for controlling, SCADA and energy management system.

Ordering information

NRM01 - A 1 C

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① Series: NRM01

② Function code:

A = Ammeter

P = Active power meter

H = Power factor meter

Z = Voltmeter

Q = Reactive power meter

F = Frequency meter

③ Size: Outline Cut-out

1 = 160x80x85 151x71

3 = 80x80x85 76x76

9 = 96x96x85 88x88 (or 91x91)

Size: Outline Cut-out

2 = 120x120x85 108x108 (or 111x111)

5 = 96x48x85 92x44

A = 72x72x85 67x67

④ Extra function

C = RS485 communication

DI = On-off input

M = analog output DC4-20mA (1-3 way)

DO = On-off output

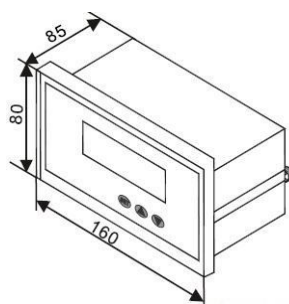
Technical specifications

Accuracy		Class 0.5 (default); Class 0.2
Display		LED
Input	Rated value	Voltage: AC100V/220V/380V etc.; Current: AC1A/5A etc.
	Overload	Continuous 1.2 times; Instant: voltage 2 times/1s, current 10 times/5s.
	Frequency	45-55Hz or 60Hz
Power supply	Working range	AC220V or AC/DC 85V-265V
	Power consumption	< 4 VA
Transmission output		< 510Ω when current output DC4-20mA; > 20kΩ when voltage output DC0-5V
Communication interface		RS485 interface; MODUBS-RTU protocol; baud rate 2400/4800/9600/19200bps
Relay output		Relay contact capacity: AC5A/250V resistive, DC5A/30V resistive
On-off input		R<500Ω on; R>100kΩ off
Dielectric strength		Power supply & input >2kV; Power supply & output >2kV; Input and output > 1kV
Insulation resistance		≥ 100MΩ
Average working time to failure		≥ 50000 h
Working condition		-10~55℃; Relative humidity < 93%; Non-corrosive gas; Altitude ≤ 2500M.
Storage condition		-20~75℃; Relative humidity < 93%

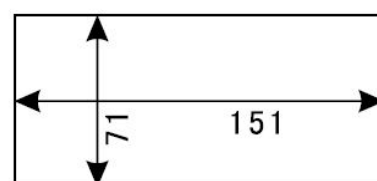
Dimensions



NRM01-□1



Outline size

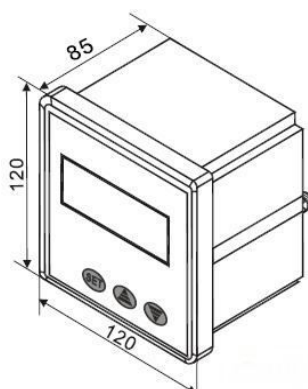


Cut-out size

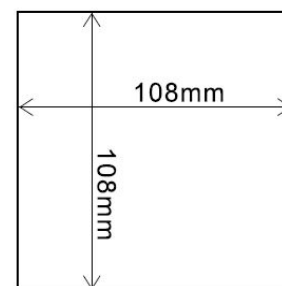
P/N	Measurement	Functions
NRM01-A1	Ammeter	Measuring data display + adjustable display value + communication interface
NRM01-Z1	Voltmeter	Measuring data display + adjustable display value + communication interface
NRM01-P1	Active Power Meter	Measuring data display + adjustable display value + communication interface
NRM01-Q1	Reactive Power Meter	Measuring data display + adjustable display value + communication interface
NRM01-H1	Power Factor Meter	Measuring data display + adjustable display value + communication interface
NRM01-F1	Frequency meter	Measuring data display



NRM01-□2



Outline size



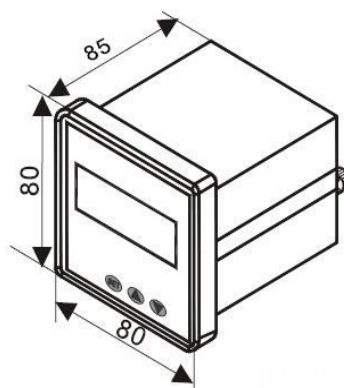
(or 111X111mm)

Cut-out size

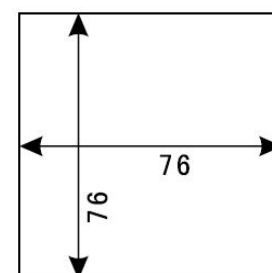
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NRM01-A2	Ammeter	Measuring data display + adjustable display value + communication interface
NRM01-Z2	Voltmeter	Measuring data display + adjustable display value + communication interface
NRM01-P2	Active Power Meter	Measuring data display + adjustable display value + communication interface
NRM01-Q2	Reactive Power Meter	Measuring data display + adjustable display value + communication interface
NRM01-H2	Power Factor Meter	Measuring data display + adjustable display value + communication interface
NRM01-F2	Frequency Meter	Measuring data display



NRM01-□3

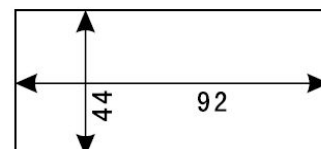
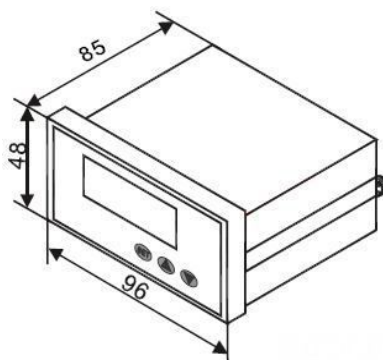


Outline size



Cut-out size

P/N	Functions	
NRM01-A3	Ammeter	Measuring data display + adjustable display value + communication interface
NRM01-Z3	Voltmeter	Measuring data display + adjustable display value + communication interface
NRM01-P3	Active Power Meter	Measuring data display + adjustable display value + communication interface
NRM01-Q3	Reactive Power Meter	Measuring data display + adjustable display value + communication interface
NRM01-H3	Power Factor Meter	Measuring data display + adjustable display value + communication interface
NRM01-F3	Frequency Meter	Measuring data display

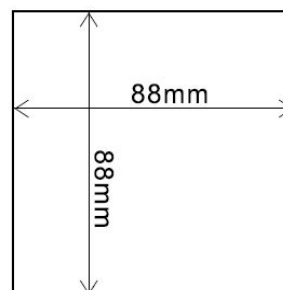
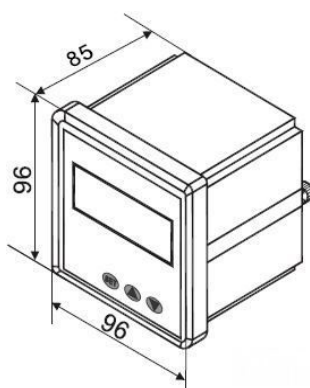


NRM01-□5

Outline size

Cut-out size

P/N	Functions	
NRM01-A5	Ammeter	Measuring data display + adjustable display value + communication interface
NRM01-Z5	Voltmeter	Measuring data display + adjustable display value + communication interface
NRM01-P5	Active Power Meter	Measuring data display + adjustable display value + communication interface
NRM01-Q5	Reactive Power Meter	Measuring data display + adjustable display value + communication interface
NRM01-H5	Power Factor Meter	Measuring data display + adjustable display value + communication interface
NRM01-F5	Frequency Meter	Measuring data display



NRM01-□9

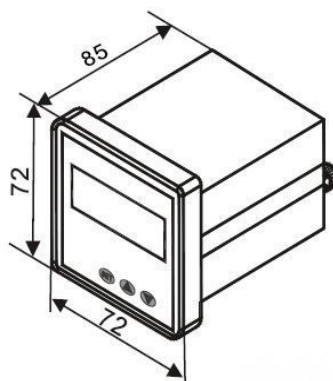
Outline size

Cut-out size

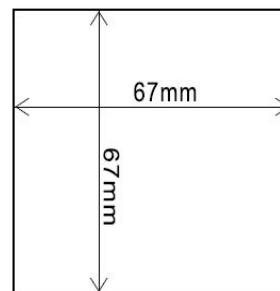
P/N	Functions	
NRM01-A9	Ammeter	Measuring data display + adjustable display value + communication interface
NRM01-Z9	Voltmeter	Measuring data display + adjustable display value + communication interface
NRM01-P9	Active Power Meter	Measuring data display + adjustable display value + communication interface
NRM01-Q9	Reactive Power Meter	Measuring data display + adjustable display value + communication interface
NRM01-H9	Power Factor Meter	Measuring data display + adjustable display value + communication interface
NRM01-F9	Frequency Meter	Measuring data display



NRM01-□A



Outline size



Cut-out size

P/N	Functions	
NRM01-AA	Ammeter	Measuring data display + adjustable display value + communication interface
NRM01-ZA	Voltmeter	Measuring data display + adjustable display value + communication interface
NRM01-PA	Active Power Meter	Measuring data display + adjustable display value + communication interface
NRM01-QA	Reactive Power Meter	Measuring data display + adjustable display value + communication interface
NRM01-HA	Power Factor Meter	Measuring data display + adjustable display value + communication interface
NRM01-FA	Frequency Meter	Measuring data display