



**Rayleigh
Instruments**

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RIHXE12R

RIHXE12R Single Phase

Two Wire Cost-effective Meter



RIHXE12R is a single phase meter features compact and cost-efficient design. It focuses on the necessary and offers an excellent price-performance ratio.

■ Highlights

- Instantaneous KWhr value measurement
- Current reverse indicator (LCD)

■ Main Functionalities

- Unidirectional Measurement
- Bi-directional Measurement configurable (optional)
- kWh reverse measured separately
- Instantaneous KWhr value measurement
- LCD backlit to increase readability in low light conditions (optional)
- Optical communication (IEC62056-21)
- SO pulse output
- Terminal cover open detection and record (optional)
- Short terminal cover
- Extended terminal cover (optional)

■ Specifications

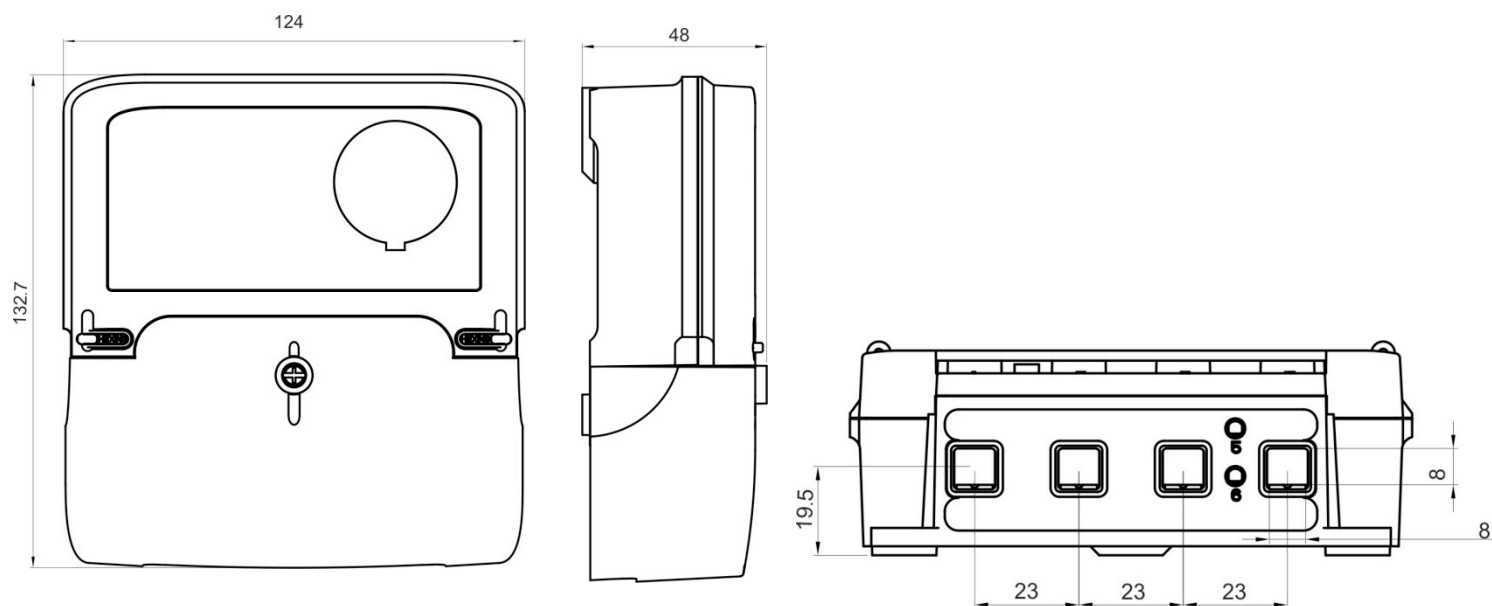
Description	Value
Accuracy	Class 1 or Class 2, Class A or Class B
Voltage	
Reference voltage	110-127V, 220-240V
Operating voltage range	80%-120%Un
Current	
Basic current	5A, 10A
Maximum current	40A, 60A, 80A, 100A
Starting current	≤0.4%Ib
Frequency	50Hz or 60Hz
Temperature	
Operation range	-25°C to +70°C
Limit range for storage and transport	-40°C to +70°C

Humidity	Up to 95%
Power Consumption Power consumption in voltage circuit (active) Power consumption in voltage circuit (apparent) Power consumption in current circuit	≤ 2 W ≤ 10 VA ≤ 1 VA
Insulation Strength AC voltage test Impulse voltage test	4kV during 1min 1.2/50 μ s mains connections 6kV
EMC Electrostatic discharges(Contact discharges) Electrostatic discharges(Air discharges) Surge immunity test Fast transient burst test Electromagnetic RF fields (80MHz to 2000MHz)	8kV 15kV 4kV 4kV 10V/m(with current), 30V/m(without current)
Connection Terminals	9mm x 9mm
Housing Protection degree Meter cover Meter base Terminal cover	IP51 Opaque PC+ glass fiber with a transparent window Opaque PC+ glass fiber Opaque PC + glass fiber
Display Digit size Number of digits	10.0mm x 4.8mm 6
Communication Interface Optical communication	IEC62056-21
Weight Net weight Package	Approx. 0.36kg(extended terminal cover) Approx.0.35kg(short terminal cover) Approx.0.06kg
Dimension Extended terminal cover Short terminal cover	132.7mm x124mm x48mm 99.5mm x124mm x48mm

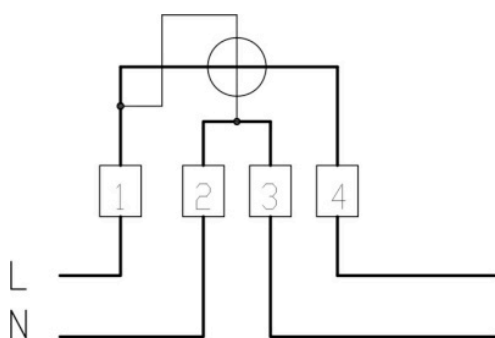
■ Standard

IEC62052-11	Electricity metering equipment (a.c.) General requirements, tests and test conditions – Part 11: Metering equipment
IEC62053-21	Electricity metering equipment (a.c.) Particular requirements –Part 21:Static meters for active energy(classes 1 and 2)
IEC62056-21	Electricity metering – Data exchange for meter reading, tariff and load control – Part 21:Direct local data exchange
EN50470-1	Electricity metering equipment (a.c.) —Part 1: General requirements, tests and test conditions — Metering equipment(class indexes A, B and C)

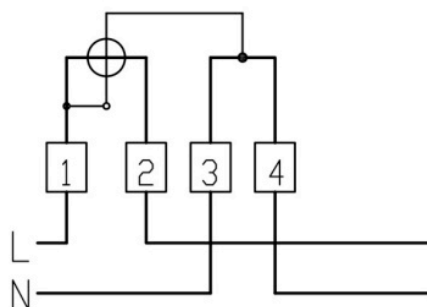
■ Dimensions



■ Connection Diagram



Symmetric Connection



Asymmetric Connection