



## **HXE115-KP**

Single Phase Conventional  
Prepayment Keypad Meter

*Focus on creating value for clients*



HXE115-KP is a new generation of single phase residential prepayment keypad meter, it complies with open standard (STS) and supported by Hexing/Itron/Landis+Gyr/Conlog...’s vending system.

## ■ Highlights

- STS standard protocol ensures an open and secure operating system
- Optical Communication, Open Protocol: DLMS/COSEM
- Prepayment and post-payment mode switchable for users’ convenience
- Wide working voltage scope, the lowest working voltage could be 100V
- High productivity and Reliability

## ■ Main Functionalities

### ➤ Measurement

- Unidirectional or Bi-directional Measurement
- Record active energy
- Instantaneous value measurement

- 12-month billing data and other frozen data for inquiry

- Prepayment is made via a numeric token with extended ways of recharging

### ➤ LCD Display

- Balance display configurable
- LCD backlights to increase readability in low light conditions(optional)
- Scrolling display configurable for instant information enquiry
- Display readable without main power (RWP)
- 6-month billing data (active energy) displayable

### ➤ RTC

- Clock accuracy (daily deviation):  $\leq 0.5s$

(23°C)

- Day light saving configurable

- Fraud protection function. The relay will be disconnected for fraud protection once detects the cover open and terminal cover open events

- Multiple event detections and records with categories of operation, power grid and tampering

- MC171 Communication with interface in accordance to DLMS standard (optional)

- Emergency Credit for a certain sum of energy supply depending on User’s credit level

- User-friendly mode for energy supply for low credit during weekends or holidays (optional)

### ➤ Tampering Proof

- Meter Cover open detection and record
- Meter terminal detection and record
- Bypass (optional)
- Large magnetic event(optional)

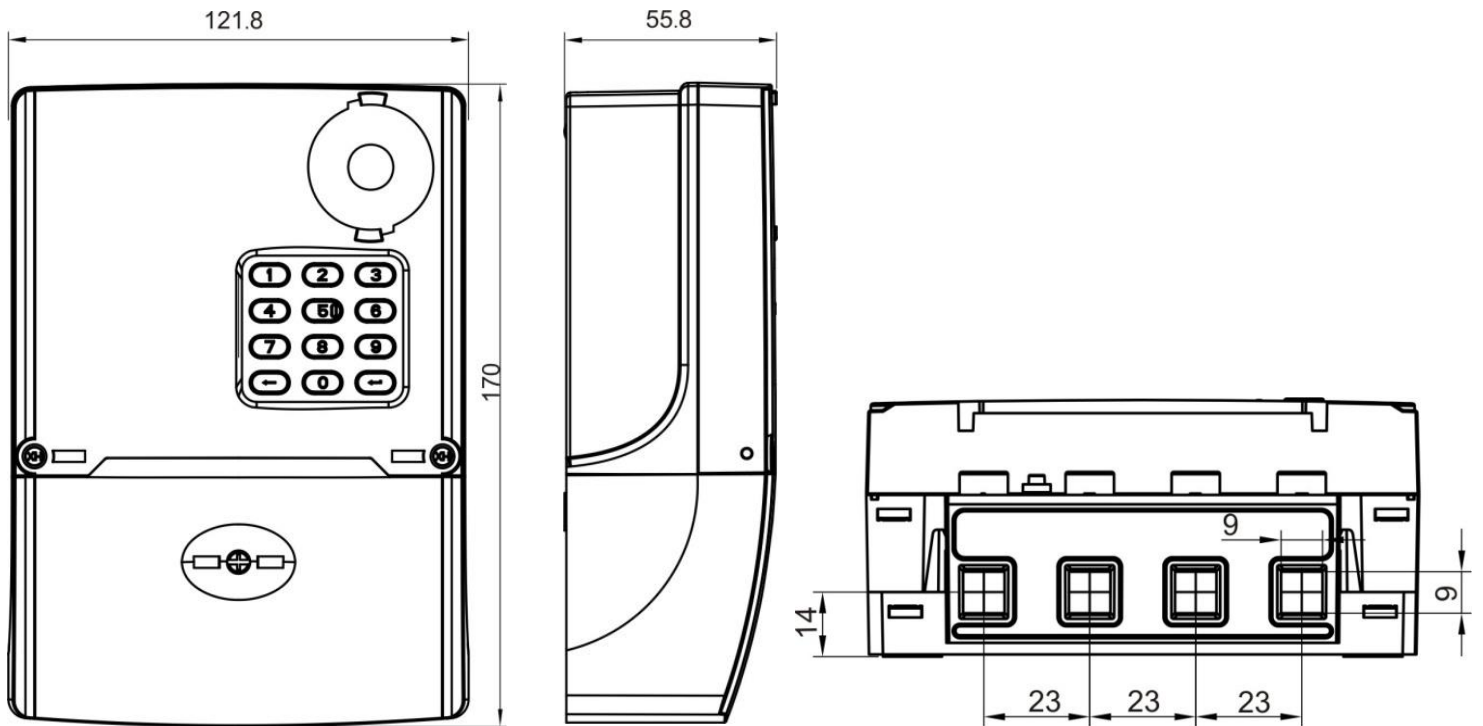
## ■ Specifications

Description	Value
<b>Accuracy</b>	Class 1 or 2 (IEC), Class A or B (MID)
<b>Voltage</b>	
Reference voltage	220-240V
Operating voltage range	70%-120%Un
<b>Current</b>	
Basic current	5A
Maximum current	80A
Starting current	≤0.4%Ib
<b>Frequency</b>	50Hz or 60Hz
<b>Temperature</b>	
Operation range	-25°C to +70°C
Limit range for storage and transport	-40°C to +85°C
<b>Humidity</b>	Up to 95%
<b>Power Consumption</b>	
Power consumption in voltage circuit (active)	≤2 W
Power consumption in voltage circuit (apparent)	≤10 VA
Power consumption in current circuit	≤1 VA
<b>Insulation Strength</b>	
AC voltage test	4kV during 1min
Impulse voltage test	1.2/50μs mains connections 6kV
<b>EMC</b>	
Electrostatic discharges(Contact discharges)	8kV
Electrostatic discharges(Air discharges)	15kV
Surge immunity test	4kV
Fast transient burst test	4kV
Electromagnetic RF fields (80MHz to 2000MHz)	10V/m(with current), 30V/m(without current)
<b>Connection Terminals</b>	∅ 8mm
<b>Housing</b>	
Protection degree	IP54
Meter cover	Transparent PC
Terminal cover	Opaque PC+ fiber glass
<b>Display</b>	
Digit size	8.0mm x 4.0mm
Number of digits	8
<b>Communication Interface</b>	
Optical port	DLMS/COMSE
<b>Weight</b>	
Net weight	Approx.0.51kg
Package	approx.0.04kg
<b>Dimension</b>	186mm×126mm×57mm

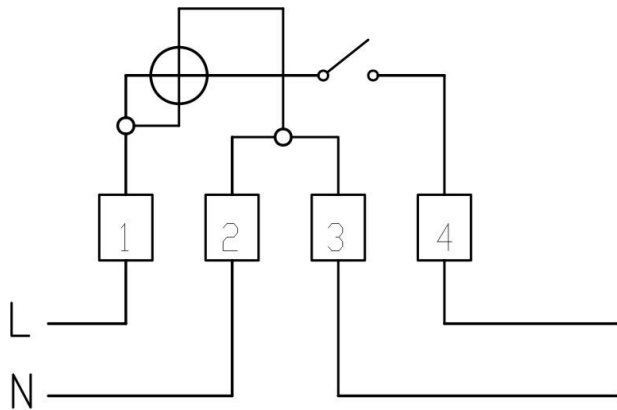
## ■ Standard

<b>IEC62052-11</b>	Electricity metering equipment (a.c.) General requirements, tests and test conditions – Part 11: Metering equipment
<b>IEC62053-21</b>	Electricity metering equipment (a.c.) Particular requirements –Part 21:Static meters for active energy(classes 1 and 2)
<b>IEC62055-41</b>	Electricity metering - Payment systems - Part 41: Standard transfer specification (STS) - Application layer protocol for one-way token carrier systems
<b>IEC62055-51</b>	Electricity metering - Payment systems - Part 51: Standard transfer specification (STS) - Physical layer protocol for one-way numeric and magnetic card token carriers
<b>IEC62056-21</b>	Electricity metering – Data exchange for meter reading, tariff and load control – Part 21:Direct local data exchange
<b>IEC62056-53</b>	Electricity metering – Data exchange for meter reading, tariff and load control – Part 53:COSEM Application layer
<b>IEC62056-61</b>	Electricity metering – Data exchange for meter reading, tariff and load control – Part 61:OBIS Object identification system
<b>IEC62056-62</b>	Electricity metering – Data exchange for meter reading, tariff and load control – Part 62:Interface classes
<b>EN50470-1</b>	Electricity metering equipment (a.c.) —Part 1: General requirements, tests and test conditions — Metering equipment(class indexes A, B and C)
<b>EN50470-3</b>	Electricity metering equipment (a.c.) —Part 3: Particular requirements —Static meters for active energy (class indexes A, B and C)

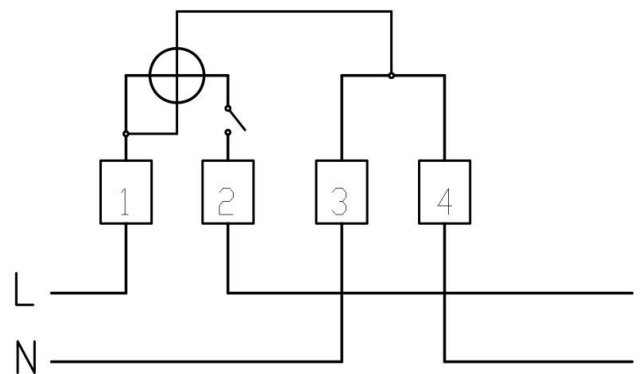
## ■ Dimension



## ■ Connection Diagram



Symmetric Connection



Asymmetric Connection

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