















# **SINGLE-PHASE KEYPAD INTEGRATED** PREPAID METER

#### **FEAUTRES**

- Count-down displayed as electricity is consumed, giving clear view of number of units left
- Industry standard wall-base mounting
- Integrated numeric keypad
- 48.5 mm x 18.5 mm liquid crystal display (LCD) screen
- Current reverse monitoring
- Internal self-check system
- Alarm indicator
- Standard Transfer Specification- (STS) compliant encryption
- Anti-tamper sensor locks the meter
- Easy installation
- Current range: 5 A to 80 A
- Single phase voltage 220 V, 230 V, 240 V

- Temperature range -25 °C to 55 °C
- Humidity range up to 95%
- IP54 protection
- Accuracy: Class 1(IEC)/class B(MID)
- Indicators: active energy, credit status and alarm
- Easy installation
- Current range: 5 A to 80 A
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#### **KEY BENEFITS**

## **For Property Owners**

- Easy control of electricity bills
- Reduced administration and risk
- Quick installation and registration
- Improved cash flow
- Prevent bill disputes

#### **For Tenants**

- · Convenient token purchase options available such as our USSD code, M-PESA Paybill
- Help desk support available every day to help with prepaid metering issues
- Better usage awareness helps tenants reduce their electricity consumption
- No unexpected large bills at the end of the month

## **SPECIFICATIONS**

## Type: Single-phase electronic prepaid meter.

- Voltage: Typically operates within a certain voltage range, like 220-240V.
- Current: Designed to handle specific current levels, e.g., 5-40A.
- Accuracy: Measurement accuracy, usually expressed as a percentage.
- Communication: Features for data transmission, such as SMS, RF, or powerline communication.

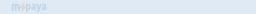
Fast • Accurate • Efficient

- Display: Digital or LCD screen for showing usage and balance.
- Prepaid Functionality: Ability to accept and manage prepaid credits.
- Protection: Includes safety features like overload protection and surge protection.
- Installation: Details on how it should be installed, such as mounting options.
- Compliance: Adherence to relevant standards and regulations.











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# **SINGLE-PHASE DIN-RAIL PREPAID METER** WITH WIRELESS CIU

## **KEY BENEFITS**

- Simple and convenient monitoring of electricity usage.
- Easy at-home recharging without direct access to the meter.
- Reduces tampering risk by separating the user from the metering device

## **SPECIFICATIONS**

Application		Direct connection		
Accuracy	Active	Class 1 or 2 (IEC), Class A or B (MID)		
Voltage	Reference voltage	110-127V,220-240V		
	Operating voltage range	70%-120%Un		
Current	Basic current	5A,10A		
	Maximum current	60A, 80A, 100A		
	Starting current	≤0.4% <b>l</b> b		
Frequency		50Hz or 60Hz		
Temperature	Operation range	<b>-25</b> ⊠∼55⊠		
	Limit range for storage and transport	-40⊠~70⊠		
Humidity		Up to 95% non-condensing		
Power Consumption	Power consumption in voltage circuit (active)	≤2 W		
	Power consumption in voltage circuit (apparent)	≤10 VA		
	Power consumption in current circuit	≤1 VA		
Insulation Strength	AC voltage test	4kV during 1min		
	Impulse voltage test	1.2/50µs mains connections 6kV		
EMC	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)		
Connection Terminals		¢ 10mm		
Housing	Protection degree	IP51		
	Meter cover	Opaque PC+ glass fiber with a transparent window		
	Meter base	Opaque PC+ glass fiber		
Communication	Optical communication	DLMS/COSEM		
Interface	PLC alternative	HX645		
Weight	Net weight	Approx.0.31kg		
	Package	Approx.0.08kg		
Dimension		138mm×83mm×48mm		
Standard		IEC62052-11, IEC62053-21, IEC62055-41,		
		IEC62055-51, IEC62056-21, IEC62056-46,		
		IEC62056-53, IEC62056-61, IEC62056-62,		
		EN50470-1, EN50470-3		























## **THREE-PHASE PREPAID METER**

The HXE310-KP is a three-phase prepayment meter designed for secure revenue collection and user convenience.

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#### **KEY FEATURES**

- Prepayment functionality for secure revenue collection.
- Compliance with the STS prepayment standard for reliable credit token entry and compatibility with existing vending systems.
- DLMS/COSEM protocol for interactive operation.
- Robust mechanical design to prevent tampering.
- User-friendly keypad and LCD display.
- Various recharge methods compatible with STS systems.
- Internal relay with multiple control options.
- Simple short key codes for easy access to basic functions.
- Event recording and features for balance refund and registration cancellation.

#### **HOW IT WORKS**

- Measuring Unit: Handles voltage and current sampling, and measurement.
- Data Processing Unit: Contains the microcontroller and memory.
- Power Supply Unit: Provides both AC and battery power.
- Display Unit: Features an LCD screen.
- Communication Unit: Supports optical and PLC communication.
- Load Control Unit: Manages relay control.

## **SPECIFICATIONS**

Parameter	Specification		
Reference voltage	3x230/400V		
Working voltage	70%Un~120%Un		
Reference current	5A		
Maximum current	100A		
Accuracy class	Class 1 (Active)		
Pulse constant	Active: 1000 imp/kWh		
Frequency	(50±5)Hz		
Temperature	Working temperature		
	range:-25°C~+60°C		
	Store temperature:-40°C~+70°C		
Humidity	≤95%		
Voltage circuit consumption	≤2W、10VA		
Current circuit consumption	≤1VA		
Starting current	4‰ <b>l</b> b		
Protection class	IP54		
Fast transient burst	4kV		
Electrostatic discharge (ESD)	Contact discharge: ±8 kV.		
Insulation	Air-gap discharge: ±15 kV		
Impulse voltage	4kV, 50Hz, 1min.		
Surge	6kV		
Over voltage	4kV		
	440VAC, 48hrs		









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# **PREPAID WATER METER**

## **FEATURES**

- Size varies by Diameter Nominal 15, 20 and 25
- Standard Transfer Specification compliant and operates with token codes
- Tamper prevention
- Up to 300 meters wireless connection with the CIU keypad
- Auto shut off when credit finishes
- Long battery life up to 6 years
- User friendly wireless keypad

## **KEY BENEFITS**

- Quick and easy installation.
- Flexible payment options for recharging
- Tamper prevention
- Vending software is flexible for settings
- Remote reading and valve control on / off

## **SPECIFICATIONS**

			in-line		
Nominal size	Dn	mm	15	20	25
Maximum flow rate	$Q_4$	m³/h	3.125	5.0	7.875
Ratio "R"	Q <sub>3</sub> /Q <sub>1</sub>		80	80	80
Permanent I flow rate	Q <sub>3</sub> 3		2.5	4.0	6.3
Transitional flow rate	Q <sub>2</sub> 2	m3/h	0.05	80.0	0.126
Minimum flow rate	Q <sub>1</sub> 1		0.031	0.05	0.0787
Minimum reading			0.0005		
Maximum reading		m <sup>3</sup>	99999		

## **DIMENSION**

Nominal size	Length	Width	Height	Connecting
mm	D			
15	165	99	104	G3/4B
20	195	99	106	G1B
25	225	103	114	G1-1/4B















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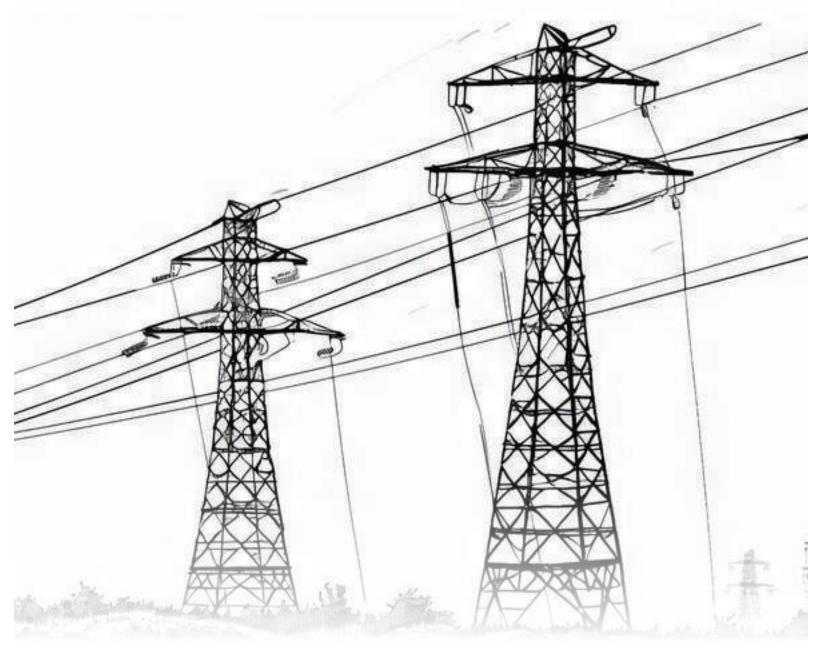












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## **SCAN ME**

























