

STD18-B Prepaid Split Keypad Din-Rail Single Phase Electricity Meter With CIU

- IP54** Ingress protection IP54 waterproof
- Up to 8 years battery life**
- Remote connection/disconnection**
- STS Standard**
- Real-time clock**
- Utilities can set TOU price into meter on request**
- Anti-Tamper
Magnetic field protection**
- LORA-RF communication (optional)**
- Pay by mobile payment
M-PESA, Alipay, MTN, Airtel, etc.**



STD18-B operates with a Din Rail mounting and pole mounting accessories, consists of two parts. A customer interface unit (CIU), and a metering and control unit (MCU). A CIU is a keypad based display, to be installed within consumers homes wherever there is a plug point. A MCU is the main meter, installed away from consumer's home in a kiosk, meter box or a pole-mounted enclosure.

Application:

Counting the electricity consumption of users over a period of time.

Compliance with Standard

- * ISO 9001 ; ISO 14001
- * STS Certificated

Electrical Parameters

Nominal Voltage	230V
Working Voltage Range	70%~120%Un
Nominal Frequency	50-60Hz
Basic Current (Ib)	5A
Maximum Current (Imax)	60A
Starting Current (Ist)	20mA
Active Energy Constant	1000imp/kWh
Measurement Accuracy	Class 1.0
Power Consumption in Voltage Circuit	<2W <8VA
Power Consumption in Current Circuit	<1VA
Operation Temperature Range	-25°C-70°C
Storage Temperature Range	-40°C-85°C

Electric Magnetic Compatibility

AC Insulation Strength	4kV at 50Hz during 1min	
Impulse voltage 1.2/50 us mains connections	8kV	
Electrostatic Discharges	Contact discharge	8kV
	Air discharge	16kV
Electromagnetic RF Field	27MHz-500MHz	10V/m
	100KHz-1GHz	30V/m
Fast transient burst test	4kV	
Protection	Class II	

Functions

MCU communicates with CIU via wireless communication such as Power Line Carrier (PLC), Radio Frequency (RF), LORA or 2-wires. This non-wired setup allows for easy inspection by utility and service providers at any time without visiting consumers' houses and reduces the chance of fraud by tampering.

Basic Functions

- * Meter Recharge By Inputting TOKEN
- * Active energy measurement
- * MD(maximum demand measurement)
- * Auto scroll mode display
- * Build-in relay control
- * Event log
- * Low Credit Alarm

Communication:

The meter is available with AMI system through LORA-RF or PLC module on request.

TOU Tariff:

Meters can be set TOU Tariff by inputting corresponding TOKEN. Utilities can set step price on request.

Anti-Tamper Functions:

Meter will automatically close the valve after detection of magnetic field and open cover event.

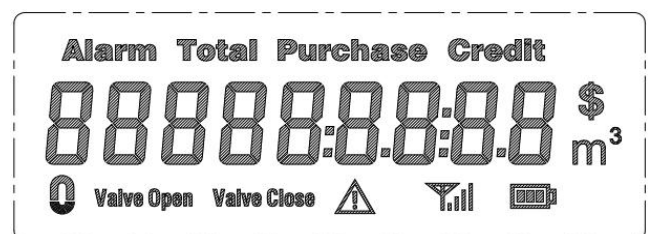
Overdraft Collection:

Electricity Overdraft can be collected day by day or month by month.

Information Inquiry:

Consumer could check the data like Credit Remain, Total Purchased and Total Credit by inputting the short code.

Liquid Crystal Display:



Three solutions to recharge prepaid electricity meter

1. By Power guard Vending software

⇒ Via local sales point or handheld mobile vending unit



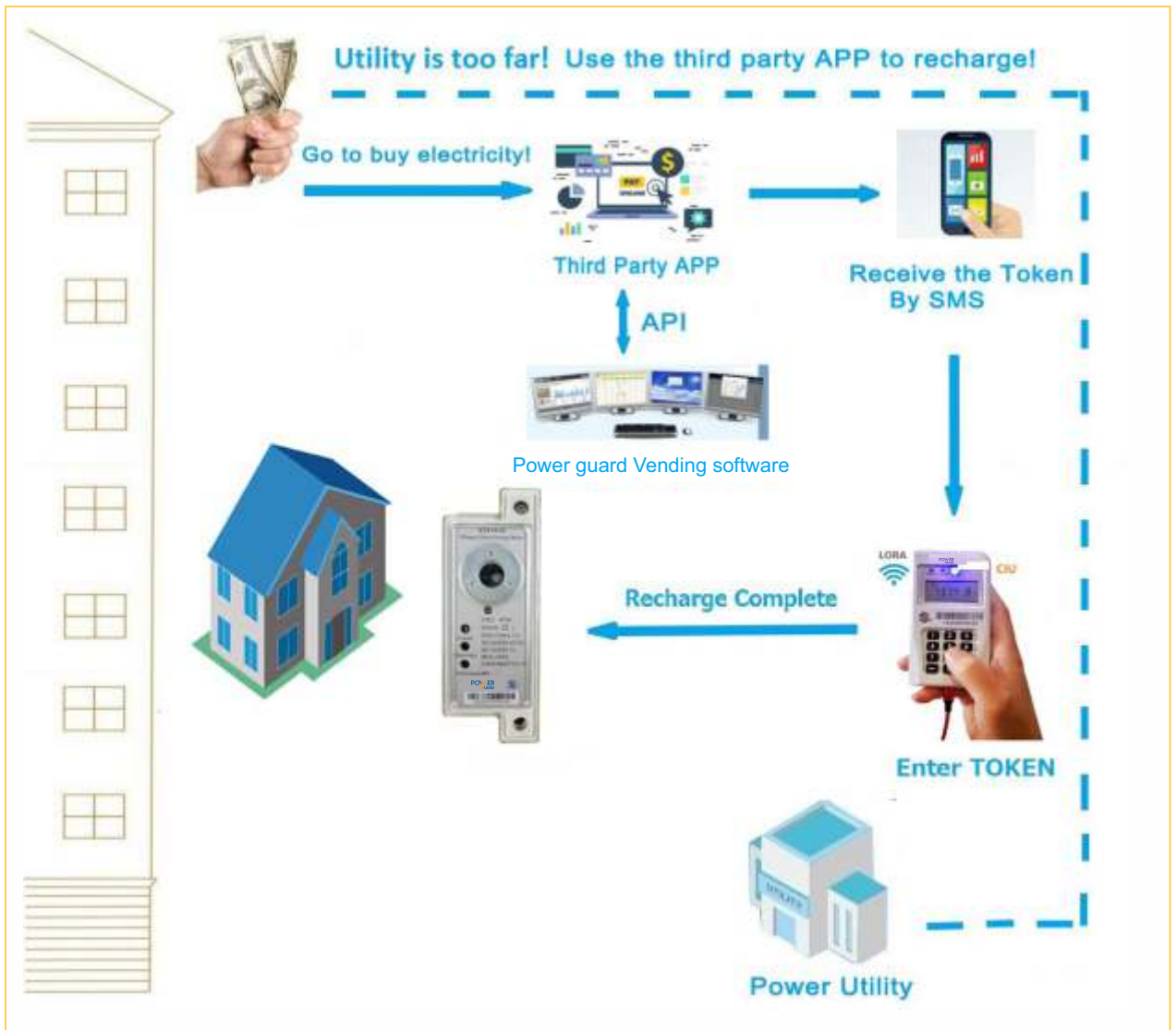
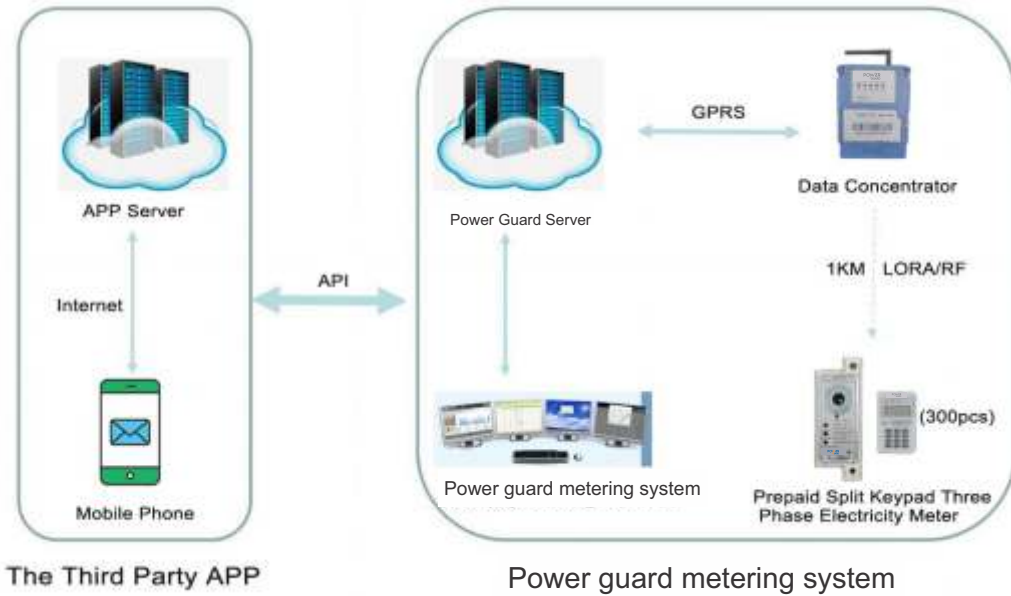
Operation of vending software

1. Login vending system
2. Meter number registration
3. Customer information registration
4. Price Setting
5. Open Account
6. Vending/Topping up meters
7. Get the Token
8. Input Token to meter with keypad
9. Recharging successfully

2. By the third party platform or local mobile payment with API

⇒ Via mobile phone

API: Application Program Interface, which is the agreement connecting the third party APP and our Power guard Vending software

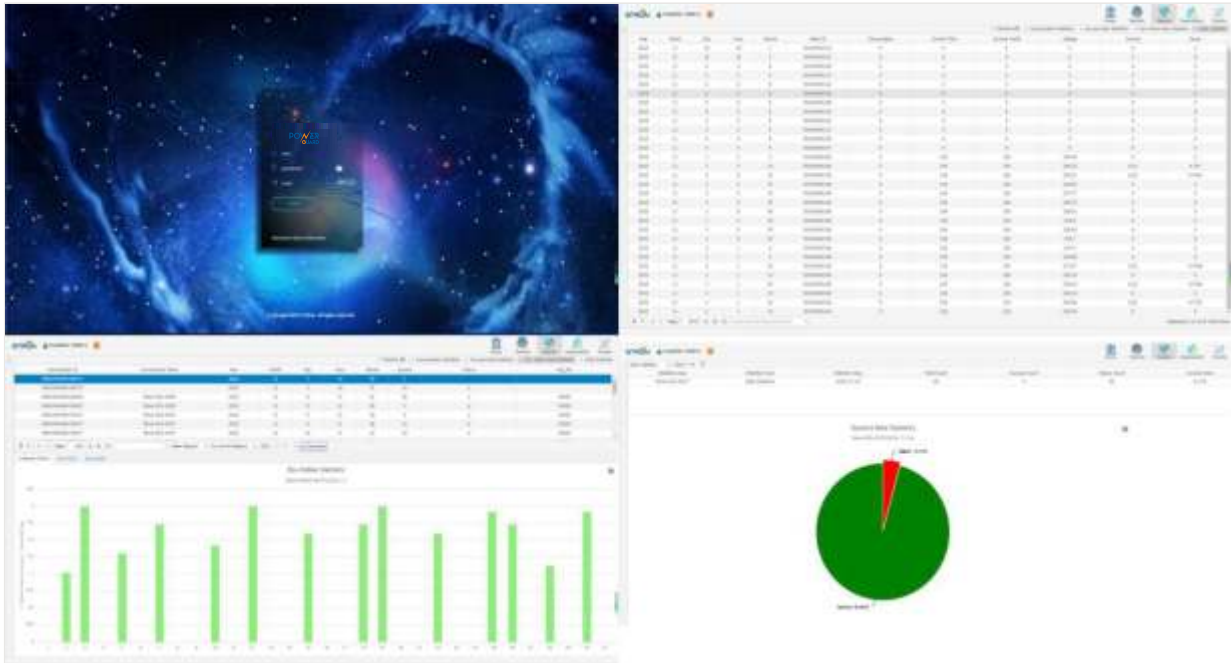


The advantages to recharge with mobile payment:

- * Users can top up electricity by mobile money without leaving the house.
- * Users could check information by their telephone.
- * It helps utilities for Revenue protection and consumer management.

3. By the AMI System

⇒ Recharge remotely via DCU and LORA-RF or PLC module



How to recharge by AMI System?

