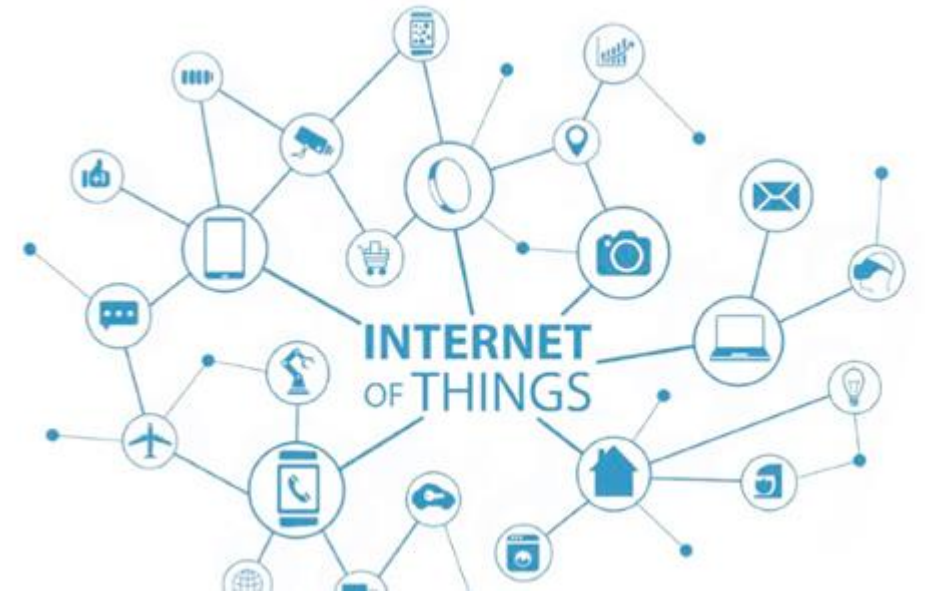
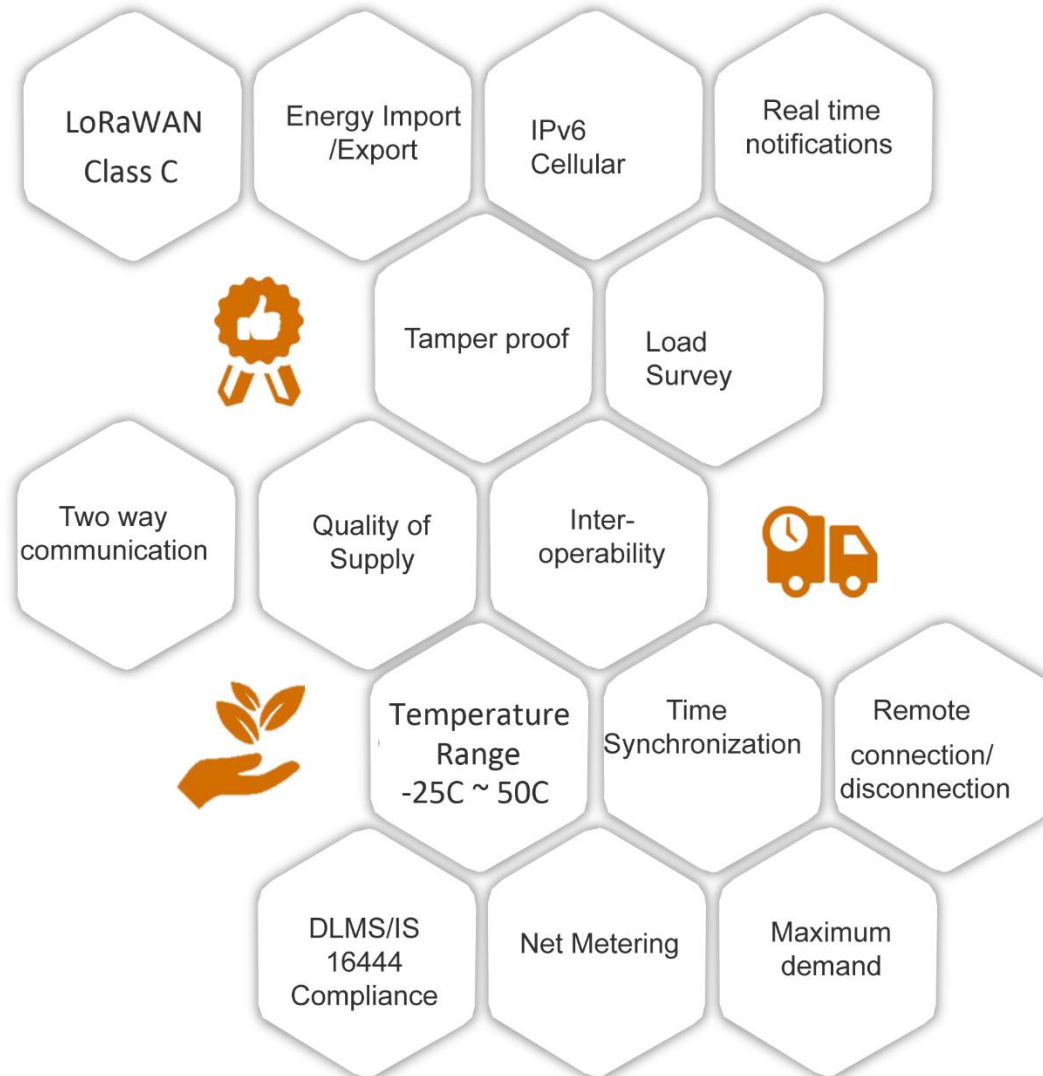




# SMART ELECTRICITY METER INTELLIGENT PLATFORM



# Advantages of our metering devices...



## SMART ELECTRIC METER – THE SPECIAL FEATURES

### **Features:**

It has the metering function of forward active power and reverse active power, can store its data and can set up group active power accordingly

With time-sharing metering function, the active electric energy is accumulated according to the corresponding time period and total, sharp, peak, flat and valley electric energy is stored.

Storage of total power and charge rates for 12 months

### **Measurement and monitoring:**

It can measure, record, display the current voltage, current power (including zero one current), power factor and other operating parameters of the current watt-hour meter. The measurement error (reference error) shall not exceed  $\pm 1\%$

### **Rates and period:**

There are two sets of schedules of rates, which can be automatically converted at the agreed time, each set of rates support 4 rates.

With calendar and clock, it can set 2 time zones throughout the year and can be programmed for 8 times within 24 hours, the minimum interval being 15 minutes.

Time periods can span zero settings.

Supports the modification of time zone table and time table through the infrared and RS485 communication interface and has security measures to prevent unauthorized operations.

**Display function:**

Display the monthly cumulative electricity consumption in the current month and the previous month and cumulative electric energy indicator of each rate and the total cumulative electric energy indicator. Current time, communication status prompt, electricity meter number is available.

LCD backlight wakeup mode, including key wake up and infrared wake up. In normal use, LCD life is not less than 10 years.

**Timing function:**

Built in hardware clock circuit with temperature compensation function is adopted with the function of automatic conversion of calendar, time keeping and leap year

Within the temperature range of -25C - +60C, clock accuracy  $\leq \pm 1\text{s/d}$ , at reference temperature (23C), clock accuracy  $\leq \pm 0.5\text{s/d}$

**Pulse output:**

The electricity meter has LED pulse and electrical pulse output function proportional to the measured electric energy

**Freezing function:**

It can realize time freezing, instantaneous freezing, agreed freezing, daily freezing and hourly freezing. The frozen contents and corresponding data identification are in line with DL/T 645-2007 and its requirements for filing documents

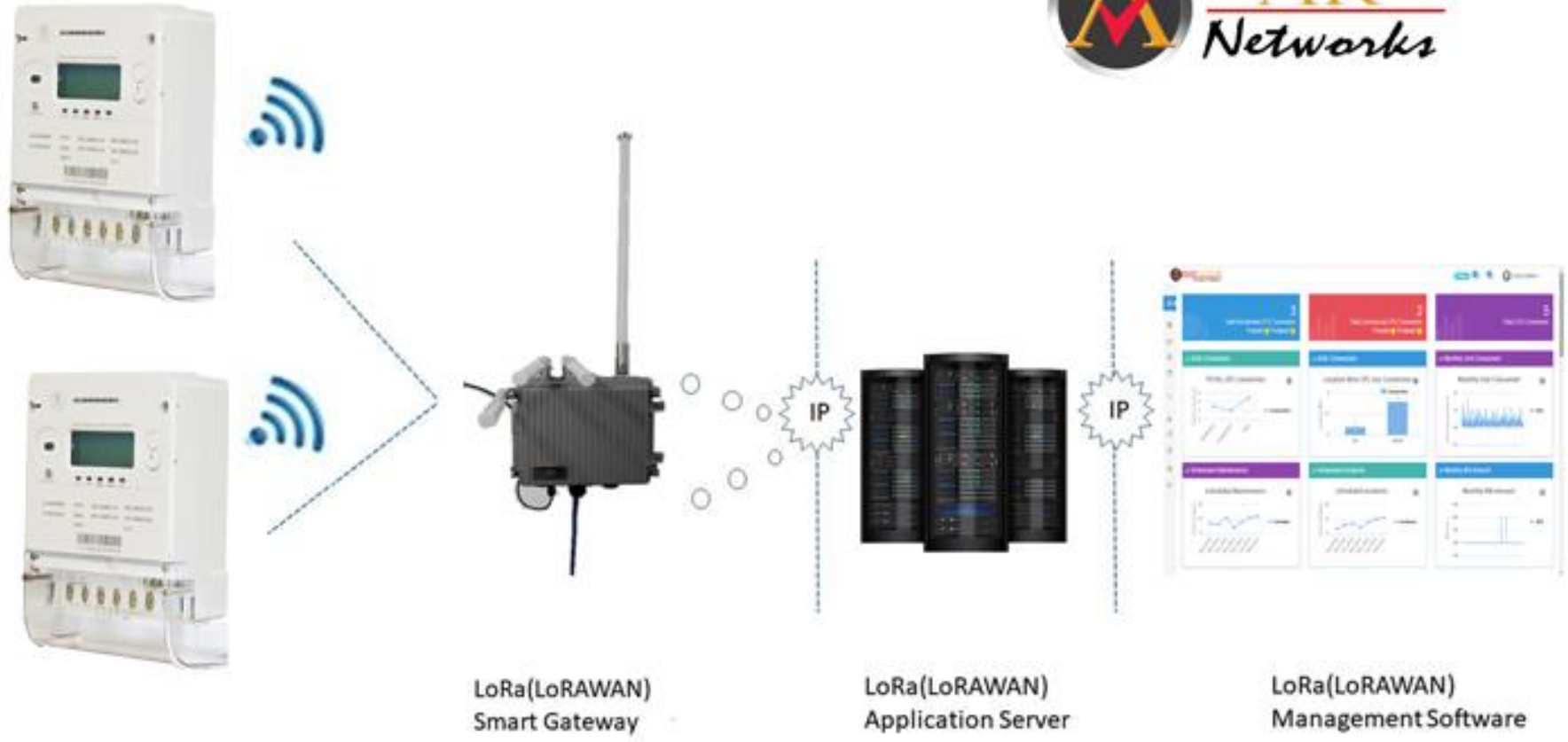
**Data storage:**

The meter has more than 90 days of hourly usage data, more than 180 days of daily data and more than one year of monthly usage data

**Battery:**

Lithium battery 7.2V\*2

# SMART ELECTRICAL METER – THE WORKS



## 16 CHANNEL LoRaWAN GW – GEN SPECS



- ✓ Maximum output power: 25dBm
- ✓ High Sensitivity: -140dBm@300bps
- ✓ Half duplex or Full duplex optional
- ✓ LoRaWAN Antenna Gain: 2dBi
- ✓ Compatible with PoE IEEE 802.3 af/at
- ✓ 10/100M Ethernet or 4G modem (WCDMA/TD-LTE/GPRS/EDGE) for networking
- ✓ Synchronization with GPS PPS signal
- ✓ Quick configuration and maintenance with WiFi
- ✓ USB interface to debug
- ✓ Power supply: DC jack, PoE and internal LiFePO4 battery
- ✓ Up to 4hr duration time with back up battery
- ✓ Support acid battery charged with solar panels
- ✓ Operating temperature: -40 degree C to +75 degree C
- ✓ Waterproof level: IP67
- ✓ 10kA surge protection
- ✓ LoRaWAN Uplink Optional - 16 normal multi-SF channels (SF7 to SF12, 125kHz), 1 single SF high speed data rate channel and 1 GFSK Channel
- ✓ LoRaWAN downlink: 1 normal channel (125kHz/250kHz/500kHz LoRa configurable or GFSK)

## DESCRIPTION

AKI2S208 is a new generation LoRaWAN GW which supports 8 channels with frequency EU 868MHz.

The GW integrates one 1.2 GHz ARM Cortex-A53 CPU which runs Linux OS and also 1x or 2x SX1301 to provide LoRa transmit and receive functionality. SX1301 is a high performance LoRa processor. The 2 x SX1301 full duplex hardware version will extend the network capacity to 4x compared to the traditional 8 channels half duplex version.

The gateway is backhauled via 10/100M Ethernet or LTE. An on-board GPS module could be used to generate a PPS signal for synchronization. Internal web UI is integrated for quick configuration and fault diagnosis analysis and maintenance. Benefitting from AKI2S208 WiFi interface, customers can use devices like PC or laptop to connect with it directly to initial, configure or debug when needed.

Various power supply plans are supported, like DC injector, PoE and internal LiFePO4 battery. It also provides an acid battery charged with solar panels as choice.

## GATEWAY APPLICATIONS COMPATIBILITY

- ✓ Smart security
- ✓ Industrial control
- ✓ Data collection from sensor mode
- ✓ Automatic meter reading
- ✓ Environment monitoring
- ✓ Building automation

## The facility is equipped with sophisticated manufacturing, testing and validation machinery...

- HV Tester 1 Phase & 3 Phase
- IR Tester 1 Phase & 3 Phase
- 48 Position Single Phase Automatic Test Bench 0.05% Accuracy
- 24 Position Three Phase Automatic Test Bench 0.05% Accuracy
- 8 Position 1 phase & 3 Phase Automatic Test Bench 0.05% Accuracy
- Heat Soaking Chamber
- Quick connection Soaking Racks
- VI Sources
- Permanent Magnet
- DC Magnet Test Setup
- AC Magnet Test Setup
- Automated Anti Tamper test setup
- High Precision Digital Vernier Calipers
- AC DC Chopper Test Setup
- 35 kV ESD tester
- Jammer
- High Precision Micro Ohm meters
- Frequency counter
- Reference Standard 1 Ph & 3 Ph Radian Make 0.05% Accuracy
- 120A, 440V Phantom load
- Traceability Software
- PCB Level tester – Functional tester
- Automatic B&C Welding setup
- Hand Held Reference standard 0.05% Accuracy
- Automatic Strapping Machine
- Power Consumption Tester
- 50A Resistive load
- DC immunity tester
- Voltage Dip tester
- Chemical welding
- High Precision Digital LCR meter





DASHBOARD

- CONNECTION Mgnt. ▾
- CONNECTION Admin. ▾
- PROCESS Mgnt. ▾
- MASTER ▾
- USER Mgnt. ▾
- REPORTS ▾

LOG OUT

### Smart Meter

Home - Dashboard

## CONNECTION Stats

Total SMART Connections



1

Residential



0

Commercial



5

Zones

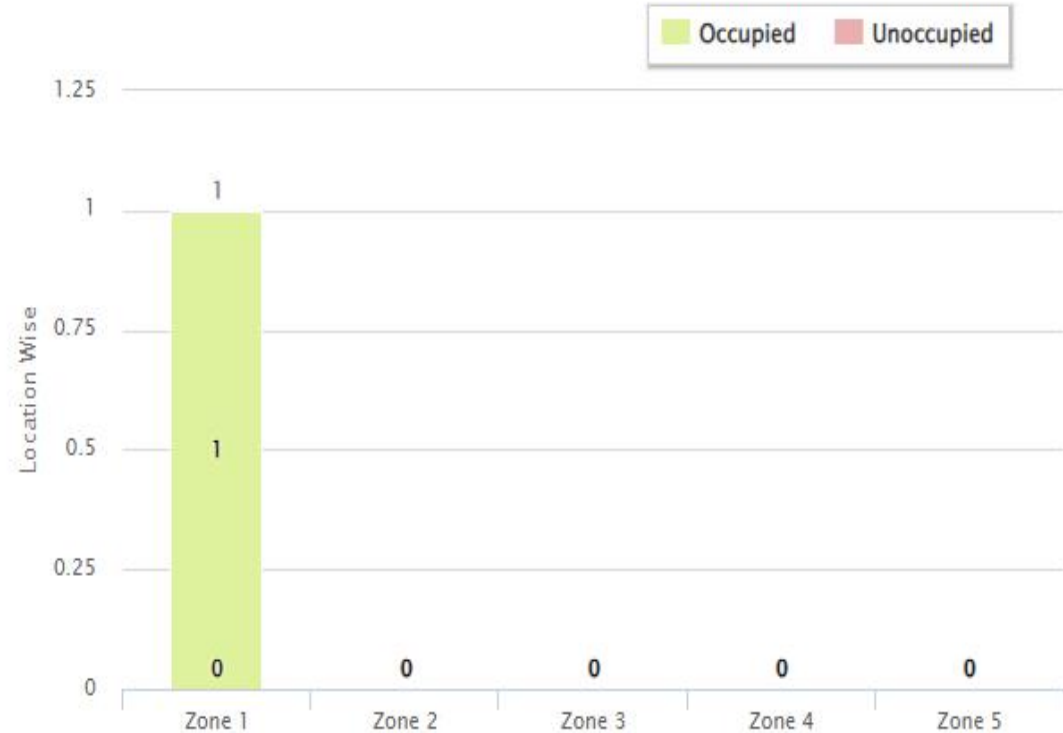


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Groups

### COMMUNITY Overview

Occupied Vs Unoccupied



DASHBOARD

CONNECTION Mgnt.

RESIDENTIAL

Prepaid Customers

Postpaid Customers

DISCONNECTION LIST

CONNECTION Admin.

PROCESS Mgnt.

MASTER

USER M...

### Residential Postpaid Customers

Home - Customers

Search Customers

Filter

Export

Add Customer

Create

<input type="checkbox"/>	CUSTOMER NAME	EMAIL	COMMUNITY NAME	VILLA/APT.	USERCODE	ACTIONS
<input type="checkbox"/>	Zone1 TEST AK121 <span>LoRaWAN</span>	support@akinfos.com	Zone 1	AK121	00110001	Actions

10 [v]      < 1 >

LOG OUT

DASHBOARD

CONNECTION Mgnt.

CONNECTION Admin.

SCANNED LIST

POSTPAID MGNT.

BILLING

PROCESS Mgnt.

MASTER

USER Mgnt.

REPORTS

## Reading

Home - Reading

BILLING SETTING

Search Billing

Add Reading

ACTIONS	TOTAL DUE	BILL #	DATE	CUSTOMER	ZONE	STARTS
+ Actions	3.29	AK00001	01/09/2023	Zone1 TEST AK136	Zone 1	01/08/2023

10

<

1

>

LOG OUT

DASHBOARD

CONNECTION Mgnt. ▾

CONNECTION Admin. ▲

• SCANNED LIST

POSTPAID MGNT.

• BILLING

PROCESS Mgnt. ▾

MASTER ▾

USER Mgnt. ▾

REPORTS ▾

PDF    x Back

<b>Consumption Bill</b>	<b>Bill #</b>	AK00001	<b>Bill Period start</b>	01/08/2023	
	<b>Date</b>	01/09/2023	<b>Bill Period end</b>	31/08/2023	
<b>Customer Details</b>			<b>Gas Usage Charges</b>		
Account No	00110136	<b>Meter Reading</b>		Unit Consumed(m <sup>3</sup> )	0.19
Name	Zone1 TEST AK136	<b>Previous</b>	<b>Present</b>	Unit Price	AED 16.50
TRN		0.00	0.19	Pressure Correction Factor	AED 1.00
Outlet				Total Consumption Charges	AED 3.13
Meter No		<b>On Date</b>	<b>On Date</b>	Meter Charges	AED 0.00
Contact No	9876543210	01/08/2023	31/08/2023	Maintenance Charges	AED 0.00
Location				Other Charges	AED 0.00

LOG OUT



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Coimbatore , INDIA



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INFOTECH

Thank  
You