

Billion SG3015

Compact ZigBee Power Meter Series

The Billion SG3015 series is a cost-effective energy monitoring and management solution deployed in Home Area Networks, solar system, factory, commercial building and warehouse etc. The device allows the users to monitor how much electricity is being used by each individual electronic device so that energy efficiency can be improved.

The Billion SG3015 series can store the measured electricity data and wirelessly communicate this information to a cloud, PC, or mobile phone through a Smart Energy Gateway. The Billion SG3015 series is available in four models according to different types of connector in order to meet users' electrical environments. The user can measure the energy usage of an air conditioner by plugging it into the Billion SG3015-T1. They also can deploy the Billion SG3015-T3 or the Billion SG3015-T4 in a power cabinet in order to measure and monitor the electrical consumption throughout the entire power circuit.

Remote Control and Energy Management

Billion SG3015-T1 and SG3015-T2 meters with remote control function enable users to optimize energy management of electrical appliances. The maximum measurement and control current is up to 15A.

Comprehensive Measurement Capability

The Billion SG3015 Series supports comprehensive measurement functions including Active Power (W), Total Accumulated Electricity Consumption (kWh), Interval Electricity Consumption (kWh), Voltage (V), Current (A), Apparent Power (VA), Power Factor (PF), etc. It allows users to capture energy usage statistic for trend analysis and usage profiling, hence save money by shifting their usage pattern.

High Measurement Accuracy

The Billion SG3015 Series is capable of measuring very small power consumption up to 0.001kWh letting user capture every moment of energy loss. Its measurement accuracy is in the range of $\pm 0.5\%$ (At PF=1.0, at Rated Current).

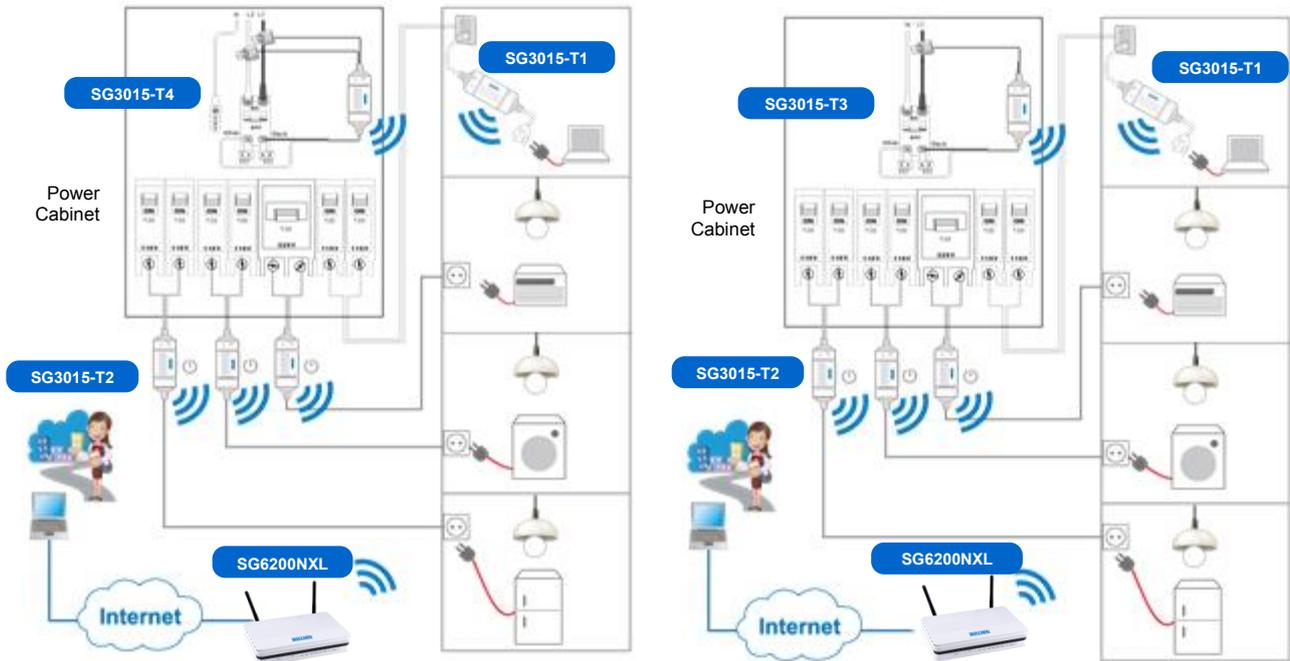
Power Surge Protection (Available for SG3015-T1 and SG3015-T2)

With built-in real zero-crossing switch and soft start power surge protection features, the device can protect your electronic appliances from power surges in your electrical system.

- Fully complied with IEEE 802.15.4 ZigBee standard
- Electricity usage data and other indicator information collection
- < 0.5% Wh accuracy
- Power surge protection
- Electricity cost calculation
- Compact size
- Four connector types: T1, T2, T3, and T4
- Target for:
 - Sub-metering service provider
 - Residential and office users
 - Utility companies
 - Commercial building
 - Factory
 - Warehouse
 - ZigBee network system integrator and planners

Application Diagram

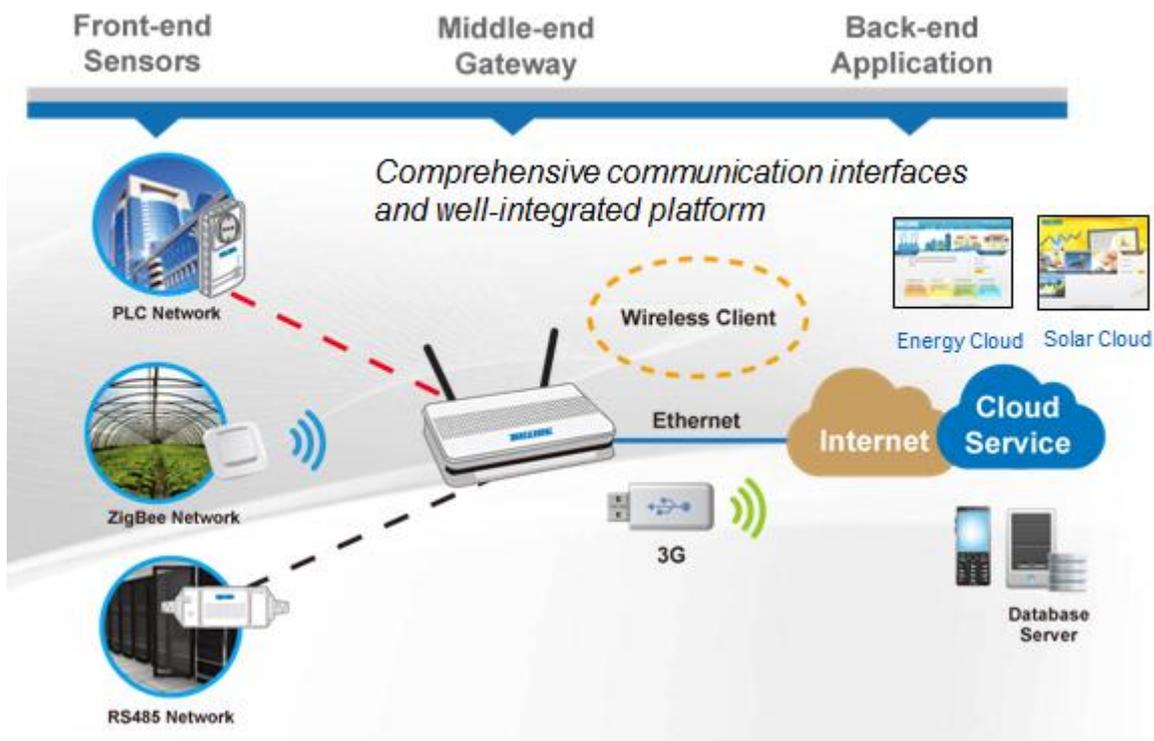
► Local Energy Management Solutions



▲ Single-phase 3-wire (e.g. USA and Taiwan)

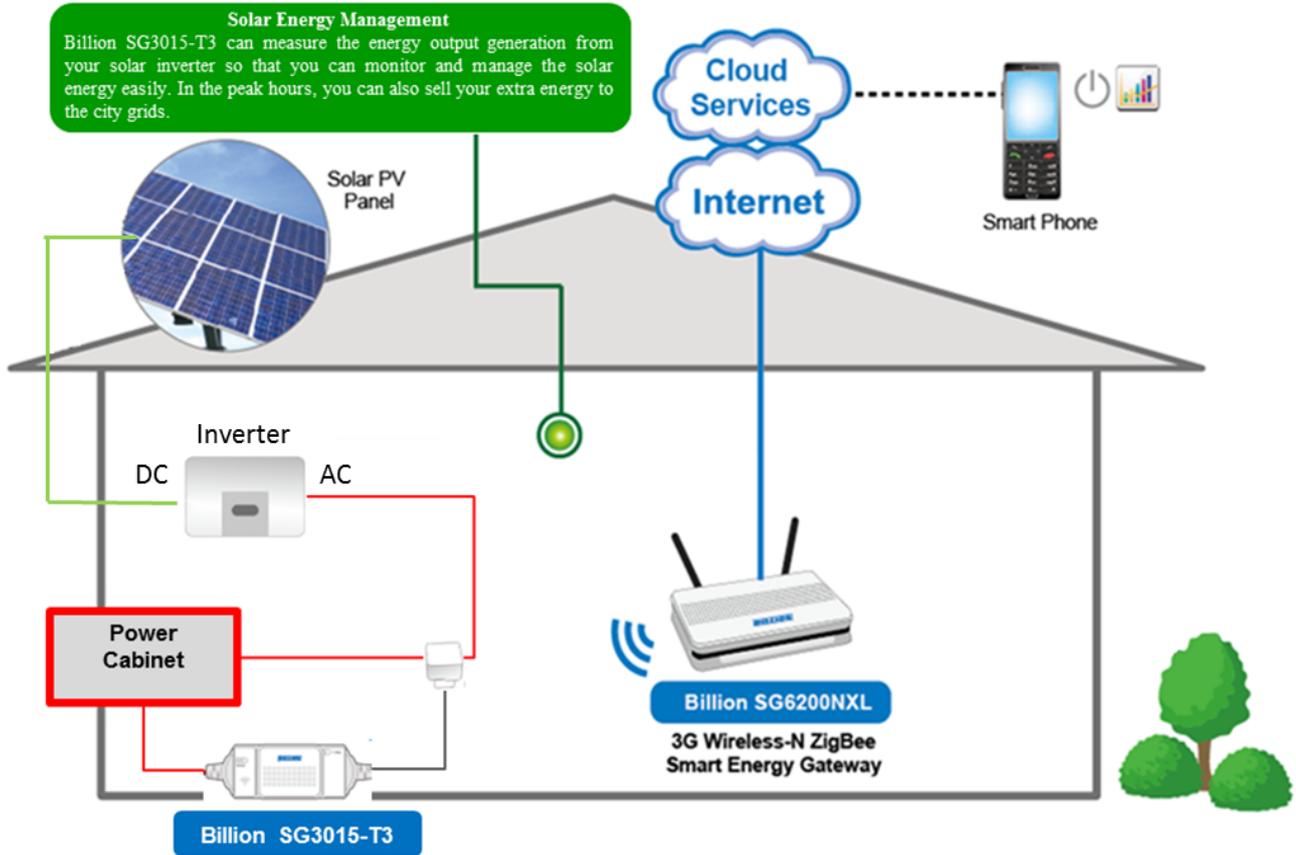
▲ Single-phase 2-wire (e.g. Europe)

► Cloud Energy Management Solutions

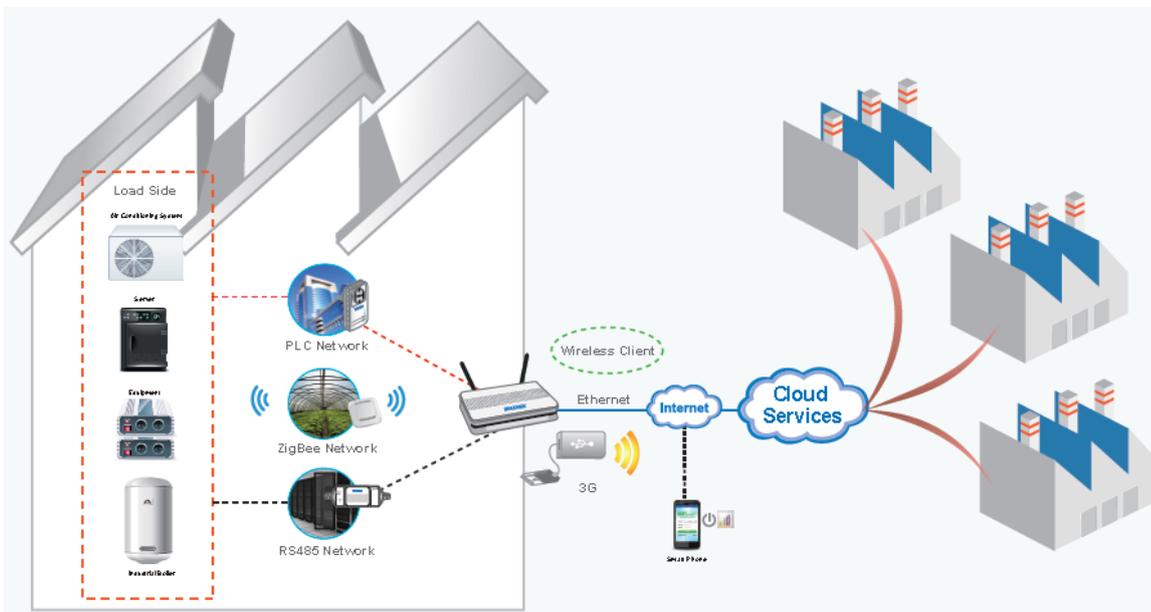


Application Scenarios

1. Solar Energy Management



2. Factory Energy Management



Technical Specifications

Product Model		Billion SG3015-T1	Billion SG3015-T2	Billion SG3015-T3	Billion SG3015-T4	
Connect Type						
		Left: Power Plug Right: Power Outlet	Left: 2 cores 14 AWG wire Right: 2 cores 14 AWG wire	Left: 2 cores 14 AWG wire Right: 1 x split-core CT (Single-phase 2-wire)	Left: 2 cores 14 AWG wire Right: 2 x split-core CT (Single-phase 3-wire)	
Rated Voltage		100~240V				
Rated Current		15A		Standard: 100A CT(15.7mm) Option: 200A CT(24mm) / 300A CT(35mm)		
Frequency		50~60Hz				
Watt-hour Constant		kh 1.0		kh 7.2		
Accuracy		Watt-hour		Watt-hour		
		Others		Others		
Interface Connection		ZigBee				
Range	Wattage	0.01W-3000W	•	•		
		0.1W-30KW			•	•
	Power Factor	0-1.00	•	•	•	•
	Voltage	100.0V-240.0V	•	•	•	•
	Current	0.01A-10.00A	•	•		
		0.1A-100.0A			•	•
	Apparent power	5VA-3000VA	•	•		
		25VA-30KVA			•	•
	Total WH	0.001-9999kWh	•	•	•	•
	Interval WH	0.001-9999kWh	•	•	•	•
Power Surge Protection & Relay		•	•			
Power Consumption		4W (Relay off) ~ 1.4W (Relay on)		0.4W		
Operating Temperature		-20°C ~ +40°C				
Safety Certification		CE / C-tick				
Dimensions(cm)		excluding cords	10.07(W) x 3.8(H) x 3.4(D)			
		including cords	SG3015-T1 124(W) x 3.8(H) x 3.4(D) SG3015-T2 70(W) x 3.8(H) x 3.4(D)		69.5(W) x 3.8(H) x 3.4(D)	

V.02052016

***Note:**

1. Percentage is just for reference. It will change according to different environments.
2. All the specifications are subject to change without prior notice.