



# SG6200NXL/ZigBee Single Meter

## Quick Start Guide

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# Chapter 1: Pair ZigBee Meter to SG6200NXL

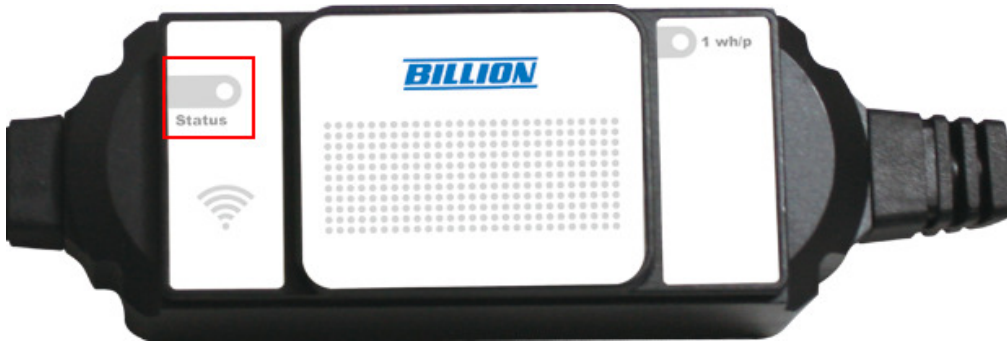
STEP 1 Power on ZigBee Meter

STEP 2 Check Status LED lit green or not

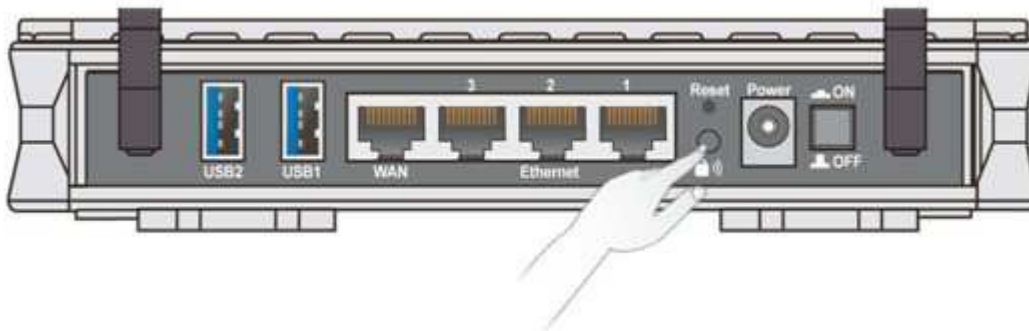
If Status LED lit green that mean ZigBee Meter is waiting mode, please go STEP 3

If Status LED blinking green that mean ZigBee Meter has been pair other SG6200NXL,

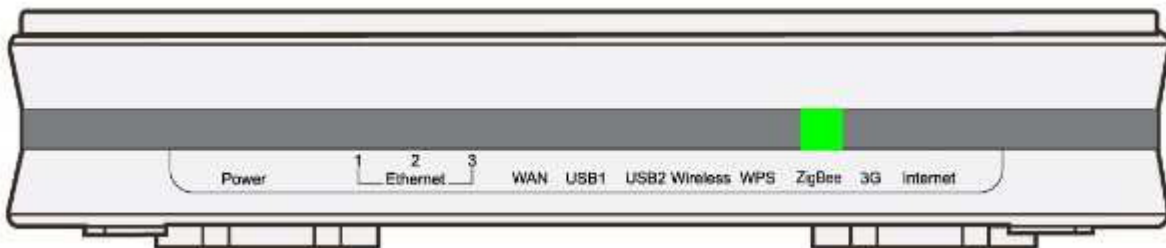
Before pair ZigBee Meter with SG6200NXL, please refer ZigBee Meter UM to do un-pairing.



STEP 3 Push ZigBee button on the rear panel of the ZigBee Coordinator to make a connection.



STEP 4 Then, ZigBee LED in the front panel will blink quickly around 60 seconds.



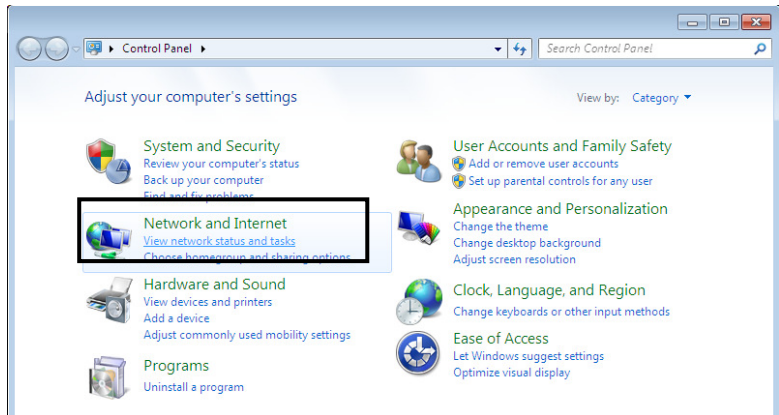
STEP 5 The smart meter will be automatically paired and joined to the ZigBee network.

The Meter Status LED would blink slowly and steadily, indicating that the power meter is successfully paired

# Chapter 2: Network Configuration

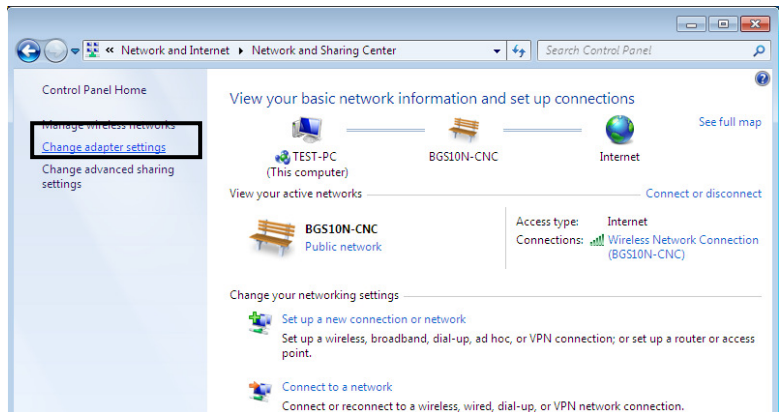
## 2.1 Configuring a PC in Windows 7

1. Go to **Start**. Click on **Control Panel**.

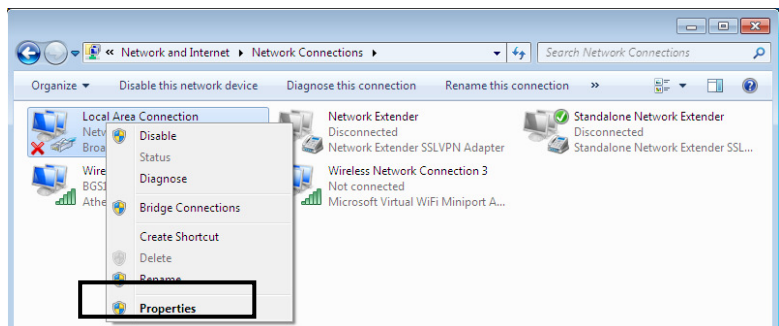


2. Then click on **Network and Internet**.

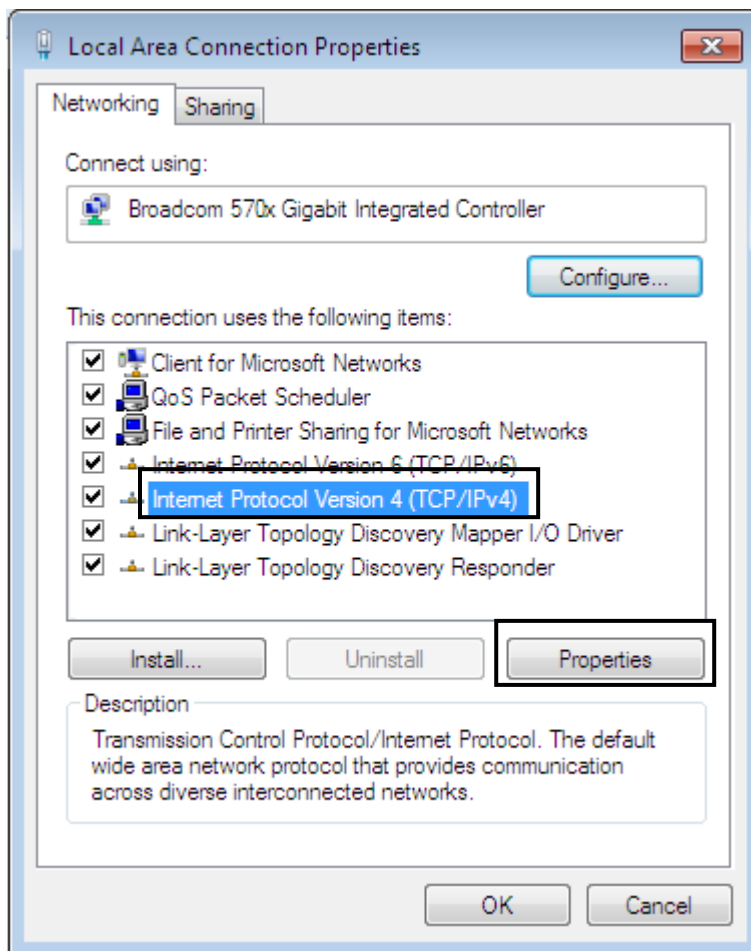
3. When the **Network and Sharing Center** window pops up, select and click on **Change adapter settings** on the left window panel.



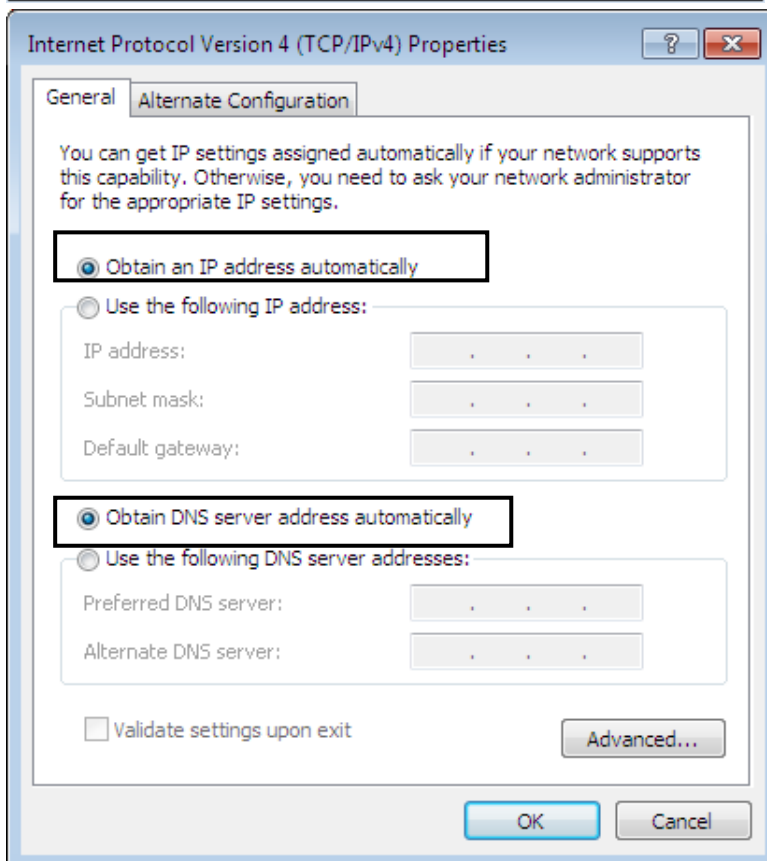
4. Select the **Local Area Connection**, and right click the icon to select **Properties**.



5. Select **Internet Protocol Version 4 (TCP/IPv4)** then click **Properties**.



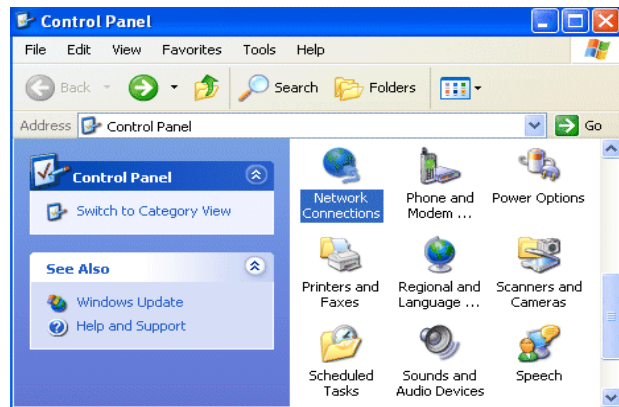
6. In the **TCP/IPv4 properties** window, select the **Obtain an IP address automatically** and **Obtain DNS Server address automatically** radio buttons. Then click **OK** to exit the setting.



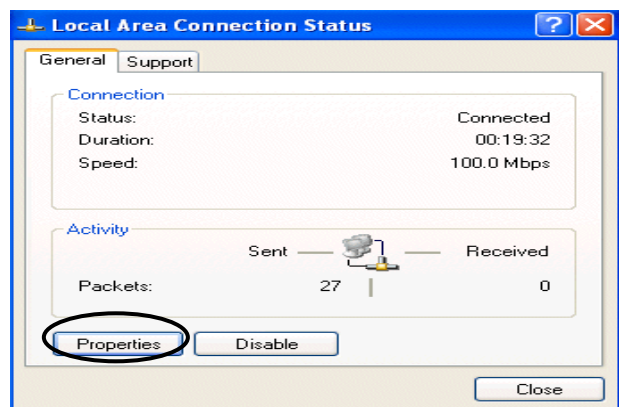
7. Click **OK** again in the **Local Area Connection Properties** window to apply the new configuration.

## 2.2 Configuring a PC in Windows XP

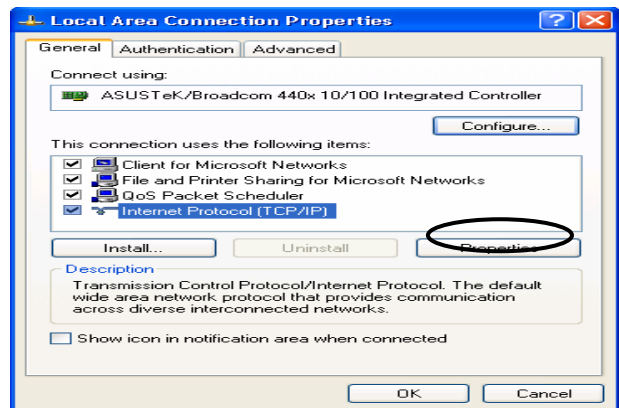
1. Go to **Start**. Click on **Control Panel**.
2. Then click on **Network and Internet**.



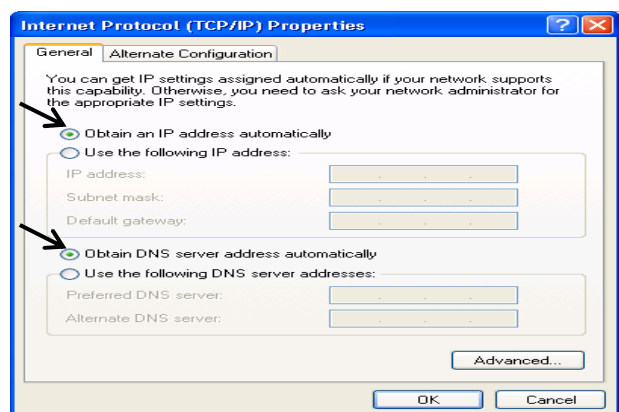
3. In the **Local Area Connection Status** window, click **Properties**.



4. Select **Internet Protocol (TCP/IP)** and click **Properties**.



5. Select the **Obtain an IP address automatically** and the **Obtain DNS server address automatically** radio buttons.



6. Click **OK** to finish the configuration.

## Chapter 3: Factory Default Settings

Before configuring the Billion SG6200NXL router, you need to know the following default settings.

### Web Interface: (Username and Password)

- ▶ Username: admin
- ▶ Password: admin

The default username and password are “**admin**” and “**admin**” respectively.

### Device LAN IP settings

- ▶ IP Address: 192.168.1.254
- ▶ Subnet Mask: 255.255.255.0

### ISP setting in WAN site

- ▶ Obtain an IP Address Automatically

### DHCP server

- ▶ DHCP server is enabled.
- ▶ Start IP Address: 192.168.1.100
- ▶ IP pool counts: 100

### LAN and WAN Port Addresses

The parameters of LAN and WAN ports are preset at the factory. The default values are shown below

LAN Port		WAN Port
IP address	192.168.1.254	The DHCP function is <i>enabled</i> to automatically get the WAN port configuration from the ISP.
Subnet Mask	255.255.255.0	
DHCP server function	Enabled in ports 1, 2 and 3	
IP addresses for distribution to PCs	100 IP addresses continuing from 192.168.1.100 through 192.168.1.199	



## Chapter 4: Information from your ISP

Before configuring this device, you have to check with your ISP (Internet Service Provider) what kind of services are provided, such as PPPoE, Obtain an IP Address Automatically, Fixed IP address.

Gather the information as illustrated in the following table and keep it for reference.

<b>PPPoE</b>	Username, Password, Service Name, and Domain Name System (DNS) IP address (it can be automatically assigned by your ISP when you connect or be set manually).
<b>Obtain an IP Address Automatically</b>	DHCP Client (it can be automatically assigned by your ISP when you connect or be set manually).
<b>Fixed IP Address</b>	IP address, Subnet mask, Gateway address, and Domain Name System (DNS) IP address (it is fixed IP address).

## Chapter 5: Configuring with your Web Browser

Open your web browser, enter the IP address of your SG6200NXL, which by default is **192.168.1.254**, and click “**Go**”, a user name and password window prompt appears. Enter the user name and password that your **Administrator** has set for you and select the **Account Type**, then click **Login**. When you are authorised, you will access to the router. The default username and password are “**admin**” and “**admin**” respectively for the Administrator account type.

The image shows a web browser interface for the 'Smart Energy Gateway'. At the top, there is a header image of three people (two men and one woman) looking at a laptop. Below the image, the title 'Smart Energy Gateway' is displayed in blue text. Underneath the title, there are three input fields: 'Username:' with an empty text box, 'Password:' with an empty text box, and 'Account Type:' with a dropdown menu showing 'Administrator'. A blue 'Login' button is positioned below the input fields. The entire interface is set against a white background with a blue decorative arc on the left side.

Smart Energy Gateway

Username:

Password:

Account Type: Administrator ▼

Login

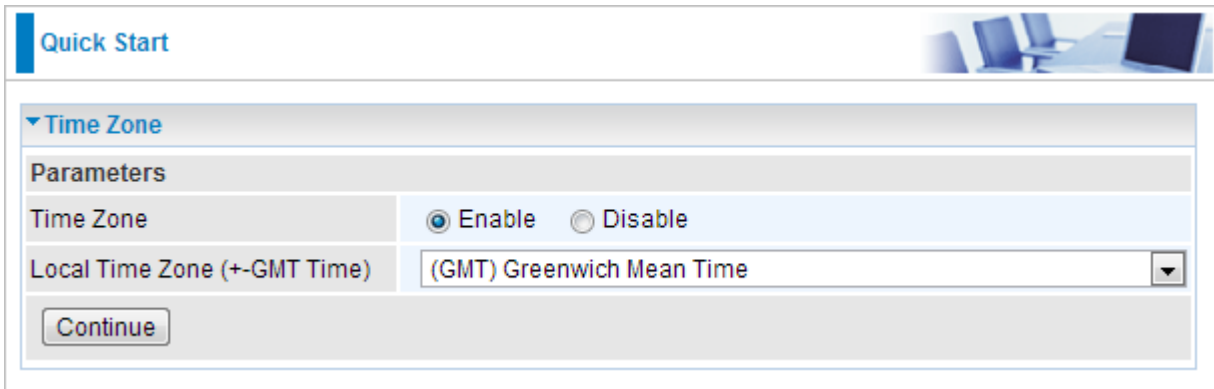
## 5.1: Internet Connection

First of all, set internet connection via Quick start

Route

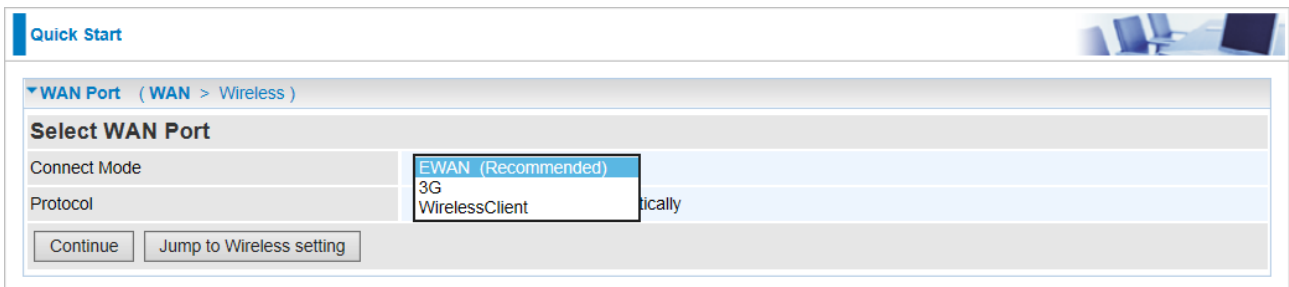
Basic->Quick Start

Set Time Zone of your country, then click Continue



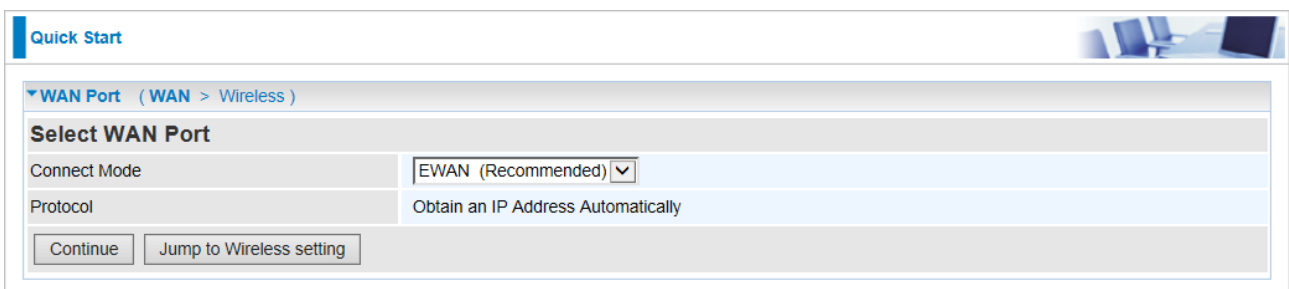
The screenshot shows the 'Quick Start' configuration page. At the top, there is a 'Quick Start' header with a blue bar and a small image of a meeting room. Below the header, the 'Time Zone' section is expanded. It contains a 'Parameters' section with two rows: 'Time Zone' with radio buttons for 'Enable' (selected) and 'Disable', and 'Local Time Zone (+-GMT Time)' with a dropdown menu set to '(GMT) Greenwich Mean Time'. A 'Continue' button is located at the bottom left of the section.

Set WAN port interface, there are three kinds of WAN interface, EWAN, 3G, Wireless Client



The screenshot shows the 'Quick Start' configuration page for 'Select WAN Port'. The breadcrumb is 'WAN Port (WAN > Wireless)'. The 'Connect Mode' dropdown is open, showing three options: 'EWAN (Recommended)' (highlighted), '3G', and 'WirelessClient'. The 'Protocol' field is currently empty. At the bottom, there are two buttons: 'Continue' and 'Jump to Wireless setting'.

### 5.1.1 EWAN



The screenshot shows the 'Quick Start' configuration page for 'Select WAN Port'. The breadcrumb is 'WAN Port (WAN > Wireless)'. The 'Connect Mode' dropdown is set to 'EWAN (Recommended)'. The 'Protocol' field is set to 'Obtain an IP Address Automatically'. At the bottom, there are two buttons: 'Continue' and 'Jump to Wireless setting'.

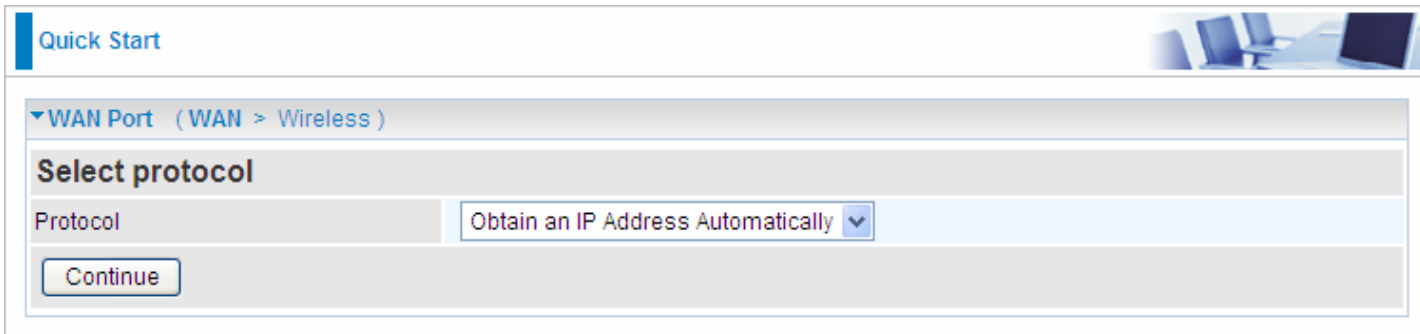
**Connect mode:** EWAN

**Protocol:** The current protocol in the device.

Click on **Continue** to choose the Protocol to connect with EWAN or click **Jump to Wireless Setting** to use Protocol: Obtain an IP Address Automatically to connect and setup wireless settings at the same time.

## 🟡 Obtain an IP Address Automatically

When connecting to the ISP, Billion SG6200NXL also functions as a DHCP client. Billion SG6200NXL can automatically obtain an IP address, subnet mask, gateway address, and DNS server addresses if the ISP assigns this information via DHCP.



Quick Start

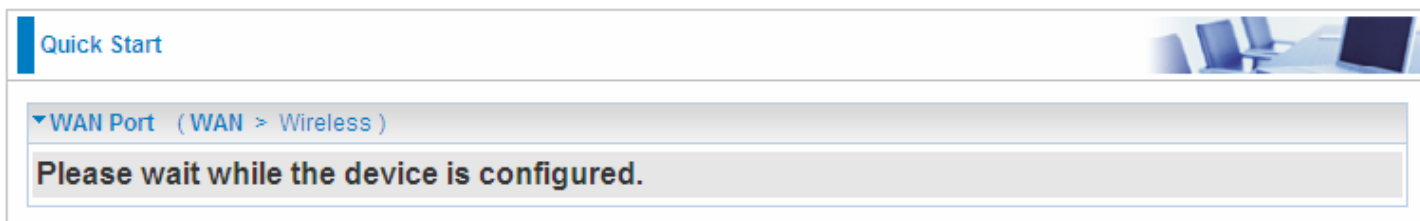
▼ WAN Port ( WAN > Wireless )

**Select protocol**

Protocol

**Protocol:** The current protocol in the device

Click on the **Continue** button and wait for your connection to be connected.

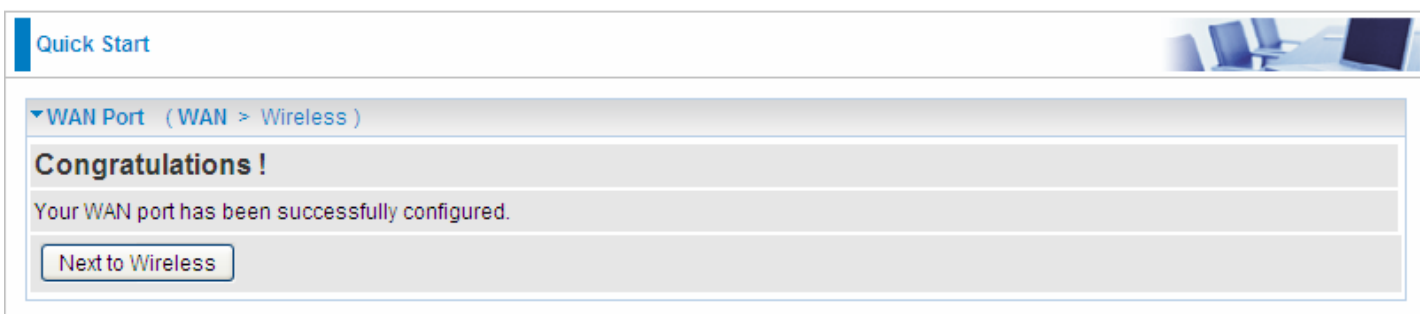


Quick Start

▼ WAN Port ( WAN > Wireless )

**Please wait while the device is configured.**

If connection is successful the following image will be shown.



Quick Start

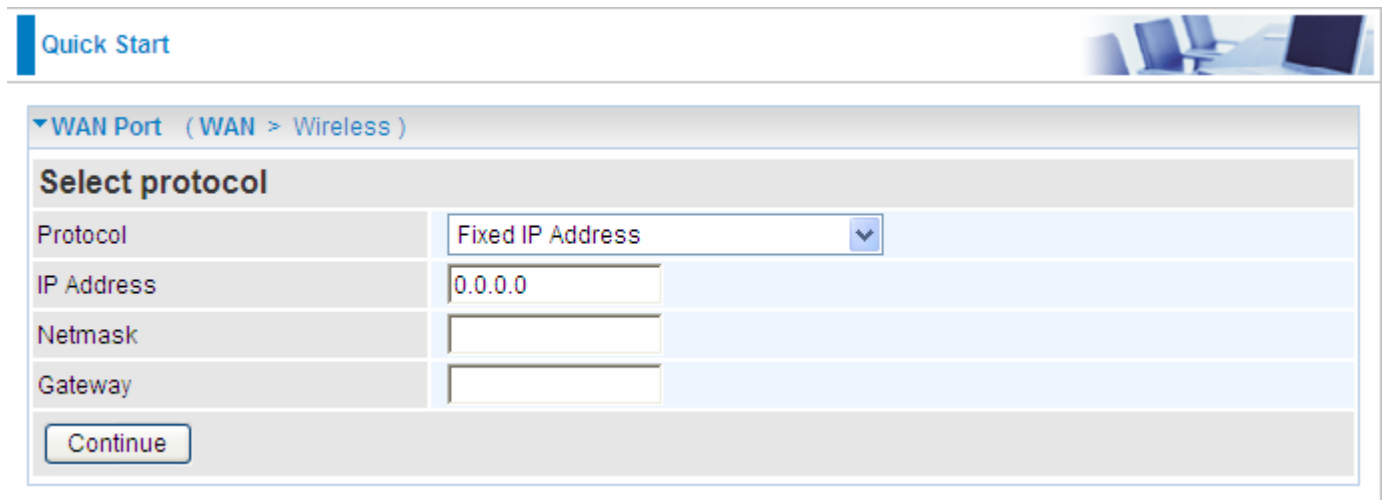
▼ WAN Port ( WAN > Wireless )

**Congratulations !**

Your WAN port has been successfully configured.

## ● Fixed IP Address

Select this option to set static IP information. You will need to enter in the Connection type, IP address, Netmask, and gateway address, provided to you by your ISP. Each IP address entered in the fields must be in the appropriate IP form, which are four IP octets separated by a dot (x.x.x.x). The Router will not accept the IP address if it is not in this format.



The screenshot shows a web interface for configuring a WAN Port. At the top left, there is a 'Quick Start' button. The main heading is 'WAN Port (WAN > Wireless)'. Below this, there is a section titled 'Select protocol'. A dropdown menu is set to 'Fixed IP Address'. Below the dropdown are four input fields: 'IP Address' (containing '0.0.0.0'), 'Netmask', and 'Gateway'. At the bottom left of the form is a 'Continue' button.

**Protocol:** The current ATM protocol in the device

**IP Address:** Your WAN IP address. Leave this at 0.0.0.0 to automatically obtain an IP address from your ISP.

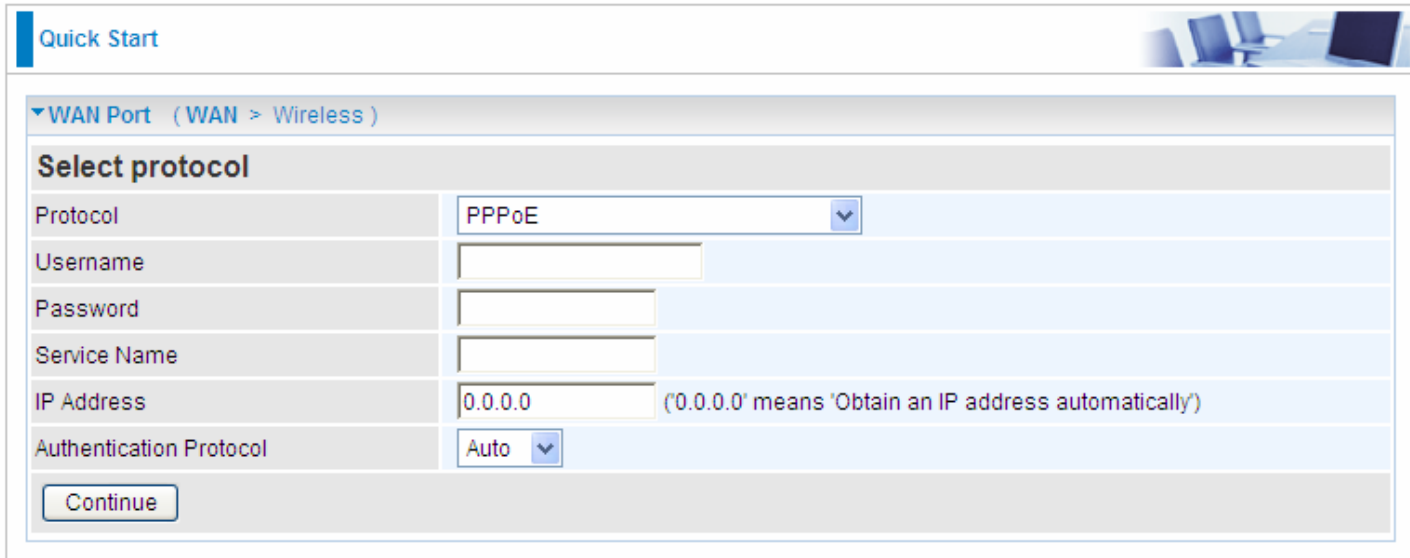
**Netmask:** The default is 0.0.0.0. User can change it to other such as 255.255.255.0. Type the subnet mask assigned to you by your ISP (if given).

**Gateway:** You must specify a gateway IP address (supplied by your ISP)

Click on the **Continue** button and wait for your connection to be connected.

## ● PPPoE

PPPoE (PPP over Ethernet) provides access control in a manner similar to dial-up services using PPP.



The screenshot shows a web-based configuration interface. At the top left, there is a 'Quick Start' link. Below it, a breadcrumb trail reads 'WAN Port (WAN > Wireless)'. The main section is titled 'Select protocol'. It contains a form with the following fields:

Protocol	PPPoE
Username	<input type="text"/>
Password	<input type="password"/>
Service Name	<input type="text"/>
IP Address	0.0.0.0 (0.0.0.0 means 'Obtain an IP address automatically')
Authentication Protocol	Auto

At the bottom of the form is a 'Continue' button.

**Protocol:** The current ATM protocol in the device

**Username:** Enter the username provided by your ISP. You can input up to 128 alphanumeric characters (case sensitive). This is in the format of “username@ispname” instead of simply “username”.

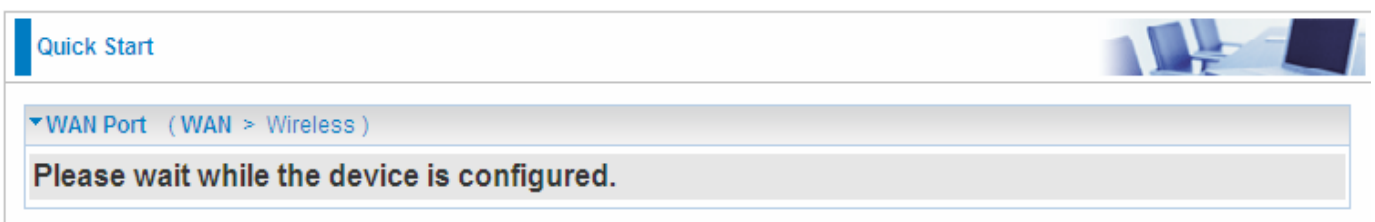
**Password:** Enter the password provided by your ISP. You can input up to 128 alphanumeric characters (case sensitive).

**Service Name:** Enter a name for this connection.

**IP Address:** Your WAN IP address. Leave this at 0.0.0.0 to automatically obtain an IP address from your ISP.

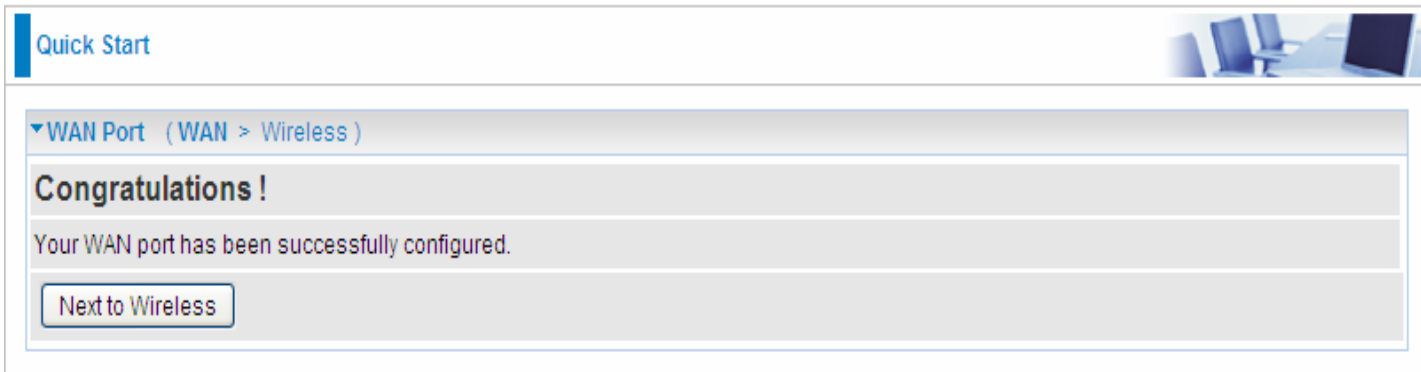
**Auth. Protocol:** Default is Auto. Your ISP advises on using Chap or Pap.

Click on the **Continue** button and wait for your connection to be connected.

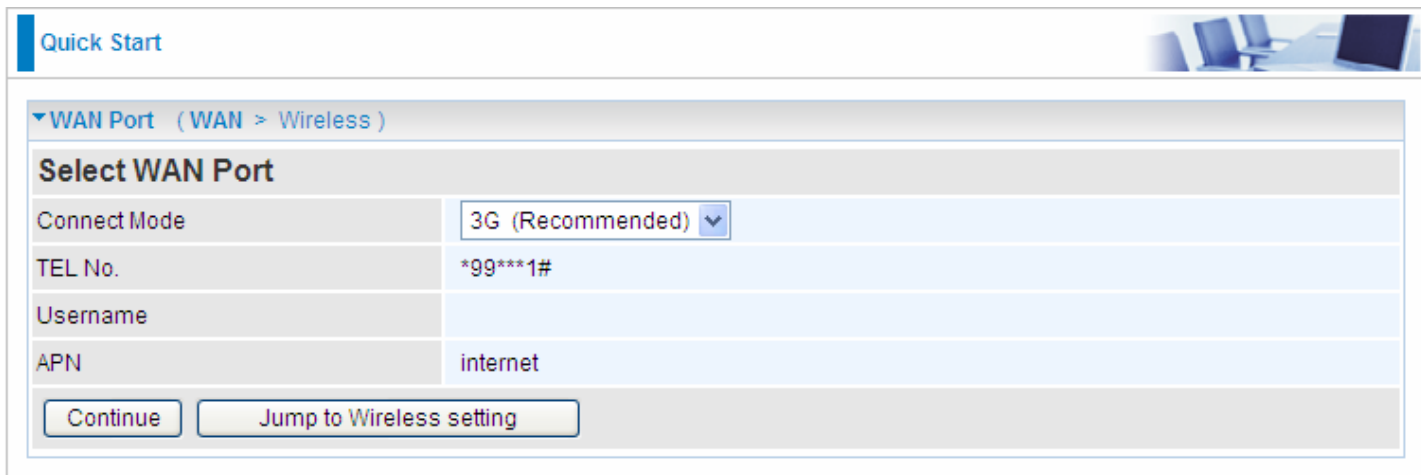


The screenshot shows the same web-based configuration interface. The breadcrumb trail is 'WAN Port (WAN > Wireless)'. The main section now displays a message: 'Please wait while the device is configured.'

If connection is successful the following image will be shown.



### 5.1.2 3G



#### Connect mode: 3G

**TEL No.:** The dial string to make a GPRS / 3G user internetworking call. It may be provided by your mobile service provider.

**Username:** Enter the username provided by your service provider.

**APN:** An APN is similar to a URL on the WWW, it is what the unit makes a GPRS / UMTS call. The service provider is able to attach anything to an APN to create a data connection. Requirements for APN assignment varies between different service providers. Most service providers have an internet portal which they connect a DHCP Server to, giving you access to the internet i.e. Some 3G operators use the APN 'internet' for their portal. The default value of APN is "internet".

### 5.1.3 Wireless Client

Configuration

WirelessClient

WirelessClient Parameters

SSID 2 Calvin

Security Mode 4 OPEN

Encryption Type 5 None

6 Apply 1 Cancel SCAN

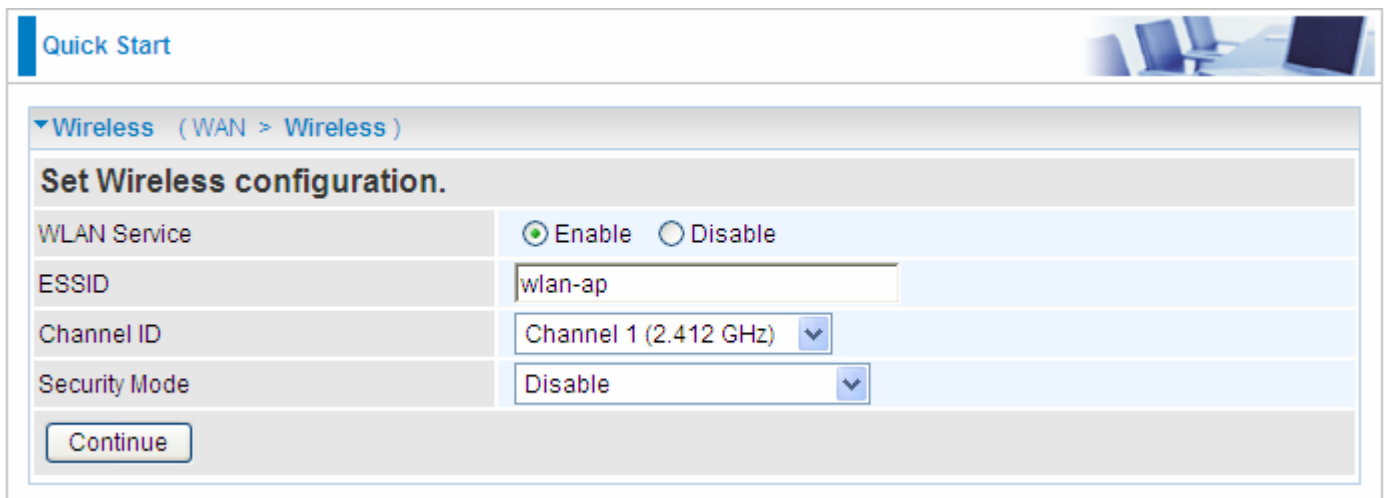
Site Survey 3

Ch	SSID	BSSID	Security	Signal(%)	W-Moe	ExtCh	NT
1	Calvin	00:04:ed:11:22:00	NONE	100	11b/g/n	ABOVE	In
1	tcriA	00:0d:0b:c0:30:9f	WEP	5	11b/g	NONE	In
7	DrayTek1	00:50:7f:e4:35:18	WPA2PSK/AES	0	11b/g/n	BELOW	In
9	12F-Meeting	00:13:d3:78:22:d8	WPAPSK/TKIP	44	11b/g	NONE	In
9	TEST123456	00:1a:ef:00:08:03	WPA2PSK/AES	44	11b/g/n	BELOW	In

1. Click SCAN to search for the available Wi-Fi device
2. Choose Wi-Fi device you want
3. Confirm the security type
4. Choose security mode
5. Choose security type
6. Click Apply, then the internet would be connected through wireless client.



## 5.2 Set Wireless configuration



Quick Start

Wireless (WAN > Wireless)

### Set Wireless configuration.

WLAN Service	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
ESSID	<input type="text" value="wlan-ap"/>
Channel ID	Channel 1 (2.412 GHz) ▼
Security Mode	Disable ▼

**WLAN Service:** Default setting is set to **Enable**.

**ESSID:** The ESSID is the unique name of a wireless access point (AP) to be distinguished from another. For security propose, change to a unique ID name to the AP which is already built-in to the router's wireless interface. It is case sensitive and must not excess 32 characters. Make sure your wireless clients have exactly the ESSID as the device, in order to get connected to your network.

**Channel ID:** Select the ID channel that you would like to use.

**Security Mode:** You can disable or enable with WPA or WEP for protecting wireless network. The default mode of wireless security is **Disable**.

## Chapter 6: Energy management of WEB GUI

SG6200NXL build simple ZigBee Application in WEB GUI, System Integrator can monitor real time power information and remote control ZigBee meter (SG3010, SG3015 serials) on the WEB GUI.

### 6.1 ZigBee Configuration

Once ZigBee Meter joined ZigBee Network, this page will show on ZigBee information.

[Advance->Power Management-> Meter Config](#)

Meter List	Model Name	Alias	Display Order	Identify	Remove
000D6F0000734644	SG3015-T1	Plug Meter	1	Identify	Remove
000D6F000072E549	SG3010-T3(100A)	CT Meter	2	Identify	Remove

**Allow Join:** SG6200NXL will start allow ZigBee node joining to ZigBee Network. **(Billion API support)**

**Scan Meter:** Show the current ZigBee nodes on the WEB GUI. **(Billion API support)**

**Meter List:** Show the EUI64 of ZigBee nodes.

**Alias:** Setup alias name for ZigBee nodes. **(Billion API support)**

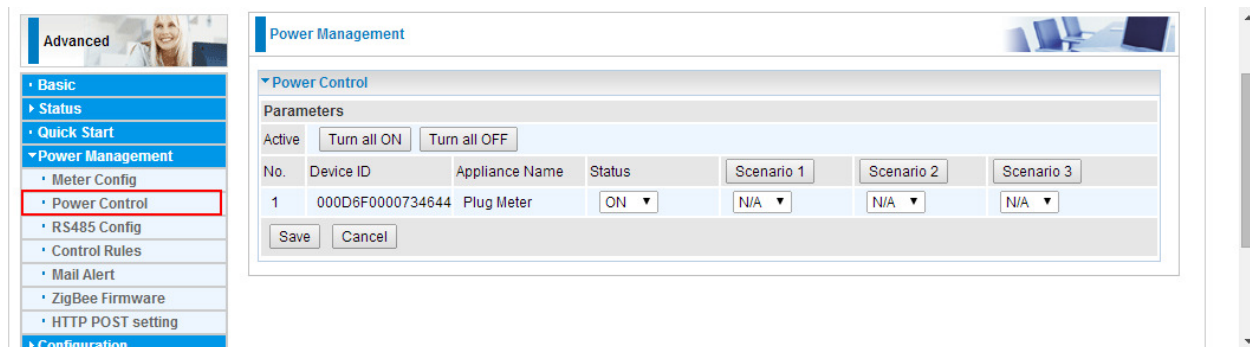
**Identify:** Click Identify button the hidden LED will be blinking orange, it can help System Integrator can find out right ZigBee node after ZigBee node has been installed. **(Billion API support)**



**Remove:** Remove ZigBee nodes from ZigBee Network. **(Billion API support)**

## 6.2 Remote Control

*Advance->Power Management-> Meter Config*



The screenshot displays the 'Power Management' configuration page. On the left, a navigation menu is visible with 'Power Management' expanded and 'Power Control' selected. The main content area shows a table with the following data:

No.	Device ID	Appliance Name	Status	Scenario 1	Scenario 2	Scenario 3
1	000D6F0000734644	Plug Meter	ON	N/A	N/A	N/A

Buttons for 'Turn all ON' and 'Turn all OFF' are located above the table, and 'Save' and 'Cancel' buttons are located below it.

**Turn all ON:** Turn all ZigBee nodes (within Relay) ON (**Billion API support**)

**Turn all OFF:** Turn all ZigBee nodes (within Relay) OFF (**Billion API support**)

**Device ID:** EUI64 of ZigBee nodes

**Application Name:** Base on Alias name

**Status:** Turn ON/OFF one ZigBee node (within Relay) (**Billion API support**)

**Scenario:** Do group control (**Billion API support**)

### **Support List:**

SG3010-T1, SG3010-T2, SG3015-T1, SG3015-T2, SG3010-iCB, SG200

### 6.3 Remote monitor

Show various power information from ZigBee Meters measured

Route

[Advance->Status->Power Status](#)

No.	Device ID	Appliance	Model Name	Power Status	Power Information	Signal Strength
					Active Power	
1	000D6F0000734644	Plug Meter	SG3015-T1	ON	25.90 (W)	100%(Rssi:-49 ,Lqi:255)
2	000D6F000072E549	CT Meter	SG3010-T3(100A)	ON	28.42 (W)	90%(Rssi:-65 ,Lqi:255)

**Device ID:** EUI64 of ZigBee Meters

**Appliance:** Base on Alias Name

**Power Status:** The current relay status of ZigBee Meter (**Billion API support**)

**Power information:**

Show Power information include Voltage, Current, Frequency, PF, Active Power, Apparent Power, Main Energy (**Billion API support**)

**Signal Strength:** Show the Signal Strength between ZigBee nodes and next ZigBee nodes.

## Chapter 7: SG3010-T1/SG3015-T1 Testing

### 7.1 Quick Installation for testing

Regarding the installation for real environment, please refer UM of SG3015

### 7.2 ZigBee Configuration

**Advance->Power Management->Meter Config**

**Power Management**

**Meter Config**

Parameters

Allow Join

Scan Meter

PLC IP Range  ~

Meter List	Model Name	Appliance	Display Order	CT Ratio	Identify	Remove
000D6F00036BB9B8	SG3015-T3(100A)	<input type="text" value="SG3015-T3"/>	1 ▼	<input type="text" value="1"/>	<input type="button" value="Identify"/>	<input type="button" value="Remove"/>
000D6F000072F087	SG3015-T1	<input type="text" value="SG3015-T1"/>	2 ▼	<input type="text" value="1"/>	<input type="button" value="Identify"/>	<input type="button" value="Remove"/>

### 7.3 Remote Control

**Advance->Power Management->Power Control**

**Power Management**

**Power Control**

Parameters

Active

No.	Device ID/EUI64	Appliance	Relay Status	Scenario 1	Scenario 2	Scenario 3
2	000D6F000072F087	SG3015-T1	ON ▼	N/A ▼	N/A ▼	N/A ▼

### 7.4 Remote Metering

**Advance->Status->Power Status**

**Status**

**Power Status**

Table


No.	Device ID/EUI64	Appliance	Model Name	Relay Status	Power Information	Signal Strength
1	<a href="#">000D6F00036BB9B8</a>	SG3015-T3	SG3015-T3(100A)	N/A	26.39 (W)	100%(Rssi:-60 ,Lqi:255)
2	<a href="#">000D6F000072F087</a>	SG3015-T1	SG3015-T1	ON	25.31 (W)	100%(Rssi:-60 ,Lqi:255)

Click Blue Link can see detail power information.



▼ Meter Status

Device Information

Model Name	SG3015-T1	Relay Status	ON
Device ID/EUI64	000D6F000072F087	Time Stamp	Thu Jul 2 18:22:48 2015
Appliance	SG3015-T1	Signal Strength	 100%(Rssi:-59)

Power Information

Voltage	110.36 (V)	Active Power	25.40 (W)
Current	0.23 (A)	Apparent Power	25.40 (VA)
Frequency	60.10 (HZ)	Main Energy	7.177 (kWh)
Power Factor	100 %	Negative Main Energy	N/A (kWh)

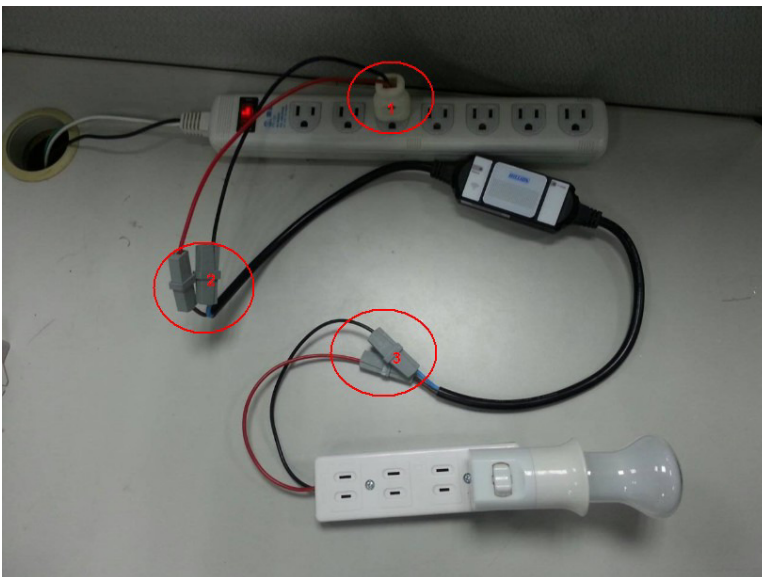
## Chapter 8: SG3010-T2/SG3015-T2 Testing

### 8.1 Quick Installation for testing

If you would like to quickly install SG3010-T2/SG3015-T2 for testing, you can refer the picture as below. Regarding the installation for real environment, please refer UM of SG3015



1. Voltage input of SG3015-T2
2. Voltage output of SG3015-T2
3. Prepare two connectors in order to connect between meter and power cable
4. Prepare a plug with power cable
5. Prepare a outlet with power cable.



1. Voltage input connects power cable with plug by connectors.
2. Plug into power outlet in order to measure the voltage.
3. Voltage output connects power cable with outlet by connectors.

## 8.2 ZigBee Configuration

### Advance->Power Management->Meter Config

Status

Power Status

No.	Device ID/EUI64	Appliance	Model Name	Relay Status	Power Information	Signal Strength
1	<a href="#">000D6F00036B538D</a>	SG3015-T2	SG3015-T2	ON	62.54 (W)	82%(Rssi:-73 ,Lqi:255)

Refresh

## 8.3 Remote Control

### Advance->Power Management->Power Control

Power Management

Power Control

Parameters

Active

No.	Device ID/EUI64	Appliance	Relay Status	Scenario 1	Scenario 2	Scenario 3
1	000D6F00036B538D	SG3015-T2	ON	N/A	N/A	N/A

Save

## 8.4 Remote Metering

### Advance->Status->Power Status

Status

Power Status

No.	Device ID/EUI64	Appliance	Model Name	Relay Status	Power Information	Signal Strength
1	<a href="#">000D6F00036B538D</a>	SG3015-T2	SG3015-T2	ON	62.54 (W)	82%(Rssi:-73 ,Lqi:255)

Refresh

Click Blue Link can see detail power information.

Status

Meter Status

Device Information			
Model Name	SG3015-T2	Relay Status	ON
Device ID/EUI64	000D6F00036B538D	Time Stamp	Fri Jan 8 08:21:01 2016
Appliance	SG3015-T2	Signal Strength	85%(Rssi:-70)
Power Information			
Voltage	110.80 (V)	Active Power	62.33 (W)
Current	0.57 (A)	Apparent Power	63.18 (VA)
Frequency	59.98 (HZ)	Main Energy	3.817 (kWh)
Power Factor	99 %	Negative Main Energy	N/A (kWh)

Refresh



## Chapter 9: SG3010-T3/SG3015-T3 Testing

### 9.1 Quick Installation for testing

If you would like to quickly install SG3010-T3/SG3015-T3 for testing, you can refer the picture as below. Regarding the installation for real environment, please refer UM of SG3015



1. Prepare a plug with power cable
2. Prepare two connectors in order to connect between meter and power cable.
3. Voltage input of SG3015-T3



1. SG3015-T3 connects power cable with plug by connectors.
2. Plug into power outlet in order to measure the voltage.
3. Current Transformer of SG3015-T3 clamps power cable of power outlet in order to measure the current value of power outlet.

## 9.2 ZigBee Configuration

**Advance->Power Management->Meter Config**

**Power Management**

**▼ Meter Config**

**Parameters**

Allow Join

Scan Meter

PLC IP Range  ~

Meter List	Model Name	Appliance	Display Order	CT Ratio	Identify	Remove
000D6F00036BB9B8	SG3015-T3(100A)	<input type="text" value="SG3015-T3"/>	1 ▼	<input type="text" value="1"/>	<input type="button" value="Identify"/>	<input type="button" value="Remove"/>
000D6F000072F087	SG3015-T1	<input type="text" value="SG3015-T1"/>	2 ▼	<input type="text" value="1"/>	<input type="button" value="Identify"/>	<input type="button" value="Remove"/>

## 9.3 Remote Metering

**Advance->Status->Power Status**

**Status**

**▼ Power Status**

**Table**

No.	Device ID/EUI64	Appliance	Model Name	Relay Status	Power Information	Signal Strength
					Active Power ▼	
1	<a href="#">000D6F00036BB9B8</a>	SG3015-T3	SG3015-T3(100A)	N/A	26.39 (W)	100%(Rssi:-60 ,Lqi:255)
2	<a href="#">000D6F000072F087</a>	SG3015-T1	SG3015-T1	ON	25.31 (W)	100%(Rssi:-60 ,Lqi:255)

Click Blue Link can see detail power information.

**Status**

**▼ Meter Status**

**Device Information**

Model Name	SG3015-T3(100A)	Relay Status	N/A
Device ID/EUI64	000D6F00036BB9B8	Time Stamp	Thu Jul 2 18:18:01 2015
Appliance	SG3015-T3	Signal Strength	100%(Rssi:-58)

**Power Information**

Voltage	109.85 (V)	Active Power	26.35 (W)
Current	0.24 (A)	Apparent Power	26.35 (VA)
Frequency	60.10 (HZ)	Main Energy	1.640 (kWh)
Power Factor	100 %	Negative Main Energy	N/A (kWh)

## Chapter 10: SG3010-T4/SG3015-T4 Testing

### 10.1 Quick Installation for testing

If you would like to quickly install SG3010-T4/SG3015-T4 for testing, you can refer the picture as below. Regarding the installation for real environment, please refer UM of SG3015



1. Prepare a plug with power cable
2. Prepare two connectors in order to connect between meter and power cable.
3. Voltage input of SG3015-T4



1. SG3015-T4 connects power cable with plug by connectors.
2. Plug into power outlet in order to measure the voltage.
3. Current Transformers of SG3015-T4 clamps same power cable of power outlet in order to measure the current value of power outlet.

## 10.2 ZigBee Configuration

### Advance->Power Management->Meter Config

Power Management

▼ Meter Config

Parameters

Allow Join

Scan Meter

PLC IP Range  ~

Meter List	Model Name	Appliance	Display Order	CT Ratio	Identify	Remove
000D6F00008E0EF3	SG3010-T4(100A)	<input type="text" value="SG3010-T4"/>	1 ▼	<input type="text" value="1.00"/>	<input type="button" value="Identify"/>	<input type="button" value="Remove"/>

## 10.3 Remote Metering

Status


▼ Power Status

No.	Device ID/EUI64	Appliance	Model Name	Relay Status	Power Information	Signal Strength
1	<a href="#">000D6F00008E0EF3</a>	SG3010-T4	SG3010-T4(100A)	ON	65.83 (W)	 81%(Rssi:-74 ,Lqi:255)

Click Blue Link can see detail power information.

Status

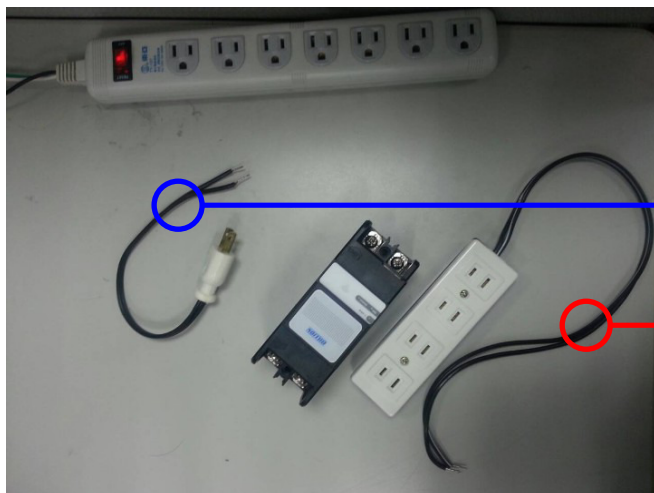
▼ Meter Status

Device Information			
Model Name	SG3010-T4(100A)	Relay Status	ON
Device ID/EUI64	000D6F00008E0EF3	Time Stamp	Sat Jan 1 01:55:02 2000
Appliance	SG3010-T4	Signal Strength	 86%(Rssi:-69)
Power Information			
Voltage	110.93 (V)	Active Power	65.95 (W)
Current	0.60 (A)	Apparent Power	66.71 (VA)
Frequency	59.98 (HZ)	Main Energy	9.792 (kWh)
Power Factor	99 %	Negative Main Energy	0.001 (kWh)

## Chapter 11: SG3010-iCB Testing

### 11.1 Quick Installation for Testing

If you would like to quickly install SG3010-iCB for testing, you can refer the picture as below. Regarding the installation for real environment, please refer UM of SG3010-iCB.



Prepare a plug with power cable

Prepare an outlet with power cable



### 11.2 ZigBee Configuration

**Advance->Power Management->Meter Config**

**Configured your meter**

▼ Meter Config

Parameters

Allow Join

Scan Meter

PLC IP Range  ~

Meter List	Model Name	Appliance	Display Order	CT Ratio	Identify	Remove
000D6F00036BCDB7	SG3010-iCB	iCB-Test	1	1	<input type="button" value="Identify"/>	<input type="button" value="Remove"/>



### 11.3 Remote Control

Advance->Power Management->Power Control

**Power Management**

**Power Control**

Parameters

Active

No.	Device ID/EUI64	Appliance	Relay Status	Scenario 1	Scenario 2	Scenario 3
1	000D6F00036BCDB7	iCB-Test	<input type="button" value="ON"/>	<input type="button" value="N/A"/>	<input type="button" value="N/A"/>	<input type="button" value="N/A"/>

### 11.4 Remote Metering

Advance->Status->Power Status

**Status**

**Power Status**

Table

No.	Device ID/EUI64	Appliance	Model Name	Relay Status	Power Information	Signal Strength
					<input type="button" value="Active Power"/>	
1	<a href="#">000D6F00036BCDB7</a>	iCB-Test	SG3010-iCB	ON	26.75 (W)	<div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background-color: #008080; margin-right: 2px;"></div> <div style="width: 20px; height: 10px; background-color: #008080; margin-right: 2px;"></div> <div style="width: 20px; height: 10px; background-color: #008080; margin-right: 2px;"></div> <div style="width: 20px; height: 10px; background-color: #008080; margin-right: 2px;"></div> <div style="width: 20px; height: 10px; background-color: #008080; margin-right: 2px;"></div> <div style="margin-left: 5px;">100%(Rssi:-55 ,Lqi:255)</div> </div>

**Status**

**Meter Status**

Device Information

Model Name	SG3010-iCB	Relay Status	ON
Device ID/EUI64	000D6F00036BCDB7	Time Stamp	Fri Apr 10 10:34:57 2015
Appliance	iCB-Test	Signal Strength	<div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background-color: #008080; margin-right: 2px;"></div> <div style="width: 20px; height: 10px; background-color: #008080; margin-right: 2px;"></div> <div style="width: 20px; height: 10px; background-color: #008080; margin-right: 2px;"></div> <div style="width: 20px; height: 10px; background-color: #008080; margin-right: 2px;"></div> <div style="width: 20px; height: 10px; background-color: #008080; margin-right: 2px;"></div> <div style="margin-left: 5px;">100%(Rssi:-55)</div> </div>

Power Information

Voltage	113.15 (V)	Active Power	26.72 (W)
Current	0.24 (A)	Apparent Power	27.16 (VA)
Frequency	59.98 (HZ)	Main Energy	1.001 (kWh)
Power Factor	98 %	Negative Main Energy	N/A (kWh)

## Chapter 12: BEsmart APP testing

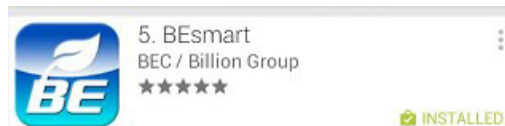
### Diagram



The BEsmart APP connects SG6200NXL by WIFI, user can use BEsmart APP to control and monitor the ZigBee device from SG6200NXL.

### Download BEsmart APP

Before using BEsmart APP, please download BEsmart APP from Google Play or APP store.



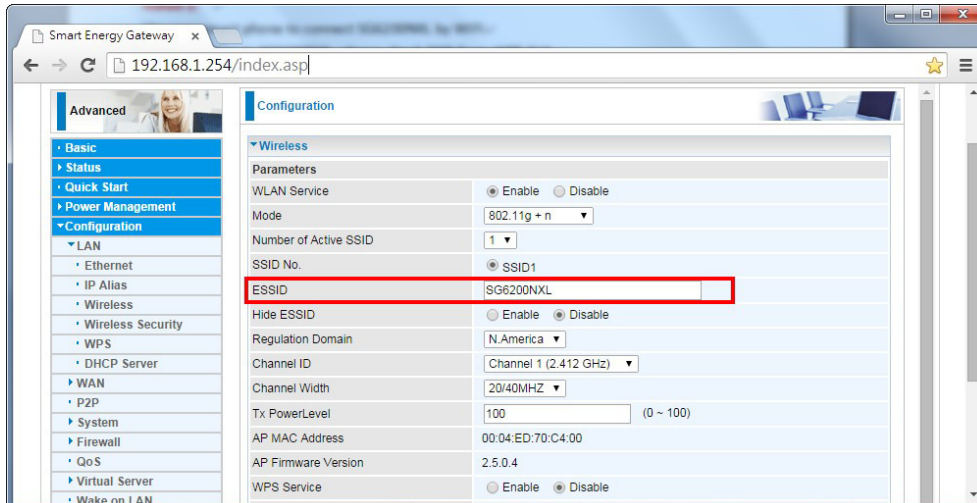
Please search for "BEsmart", and then click install to download the APP to your smart phone.

## BEsmart APP Login

### STEP-1 Check and modify SSID of SG6200NXL

Before connect to SG6200NXL, please check SSID from WEB GUI.

Advance->Configuration->LAN->Wireless

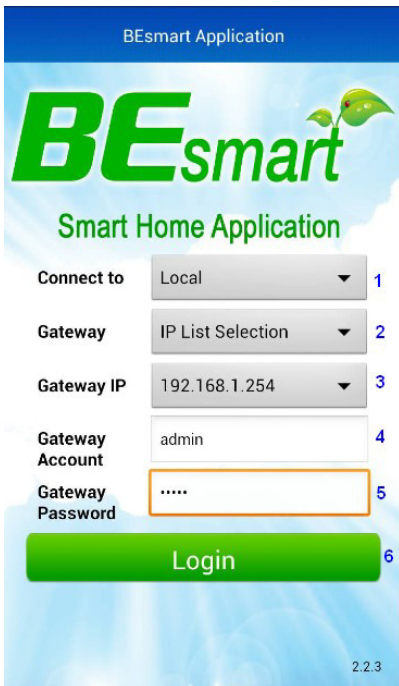


### STEP-2 Connect to SG6200NXL by WiFi





### STEP-3 Click BEsmart icon to login BEsmart APP



1. Choose connect to Local
2. Chose Gateway Auto
3. Check Gateway IP is 192.168.1.254
4. Gateway Account is admin
5. Gateway Password is admin
6. Click Login

### BEsmart APP Main Page



#### Power Metering:

1. Read real time power data from meter reading

#### Remote Control:

1. Real time power control ZigBee meters.
2. Schedule power control.

#### Temperature/Humidity

1. Read real time temperature and humidity data from sensor monitoring.
2. Control Rule for sensors

#### Smart Lighting Control

1. Real time power control Lighting device.
2. Real time dimming lighting device.
3. Schedule power control and dimming.

#### Settings:

1. Set BEsmart setting.

## Power Metering:



1. Check detail information of ZigBee device



2. Check detail power information of ZigBee meter measured.

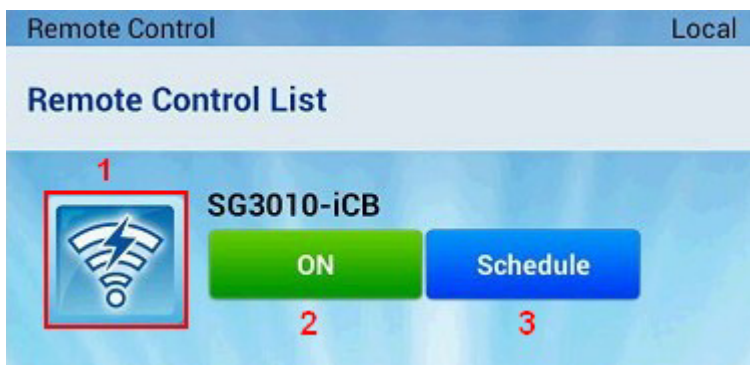


### 3. Check what ZigBee device you are checking now.

After click Identify button, the ZigBee device will blink orange.  
Then you will know what device you are checking now.



## Remote Control



If you would like to test the schedule function, please ensure the SG6200NXL connected to internet and get correct time.

Device Information		Port Status	
Model Name	SG6200NXL	Ethernet	✓
Host Name	mmp.bridge	EWAN	✓
System Up-Time	4 min(s)	3G	✗
Current Time	Wed Dec 17 06:20:31 2014	WirelessClient	✗
Software Version	1.05.ha.ds3	Wireless	✓
MAC Address	60:03:47:00:95:6c		
ZigBee Firmware	rsp-hazc-1.6		
ZigBee EU164	000D6F000176FB54		

WAN							
Port	Protocol	Operation	Connection	IP Address	Netmask	Gateway	Primary DNS
EWAN	Fixed			192.168.17.63	255.255.255.0	192.168.17.70	8.8.8.8