



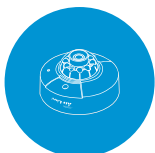
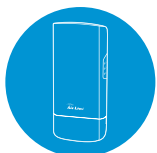
# AirMax4GW

4G LTE + WiFi Outdoor Gateway

## WISP

## Applications

WHITE PAPER



## Hardware Specification

The AirMax4GW is a standalone 4G LTE outdoor gateway that can distribute 4G or 3G Internet signal through WiFi or Ethernet connections. It is equipped with high gain LTE and WiFi antennas for better reception and transmitting distance.



### Hardware Diagram

#### 300Mbps 802.11b/g/n

Share 4G/3G Internet connection through Wi-Fi or Ethernet. The large 7dBi MIMO directional antenna delivers clear 2.4GHz WiFi signal over large areas.

#### Hardware VPN

Build secure and encrypted video stream through VPN connection



#### 4G LTE Module

Install the AirMax-4GW anywhere and connect to Internet anywhere via 4G LTE or 3G UMTS

#### High Gain 4G Antennas

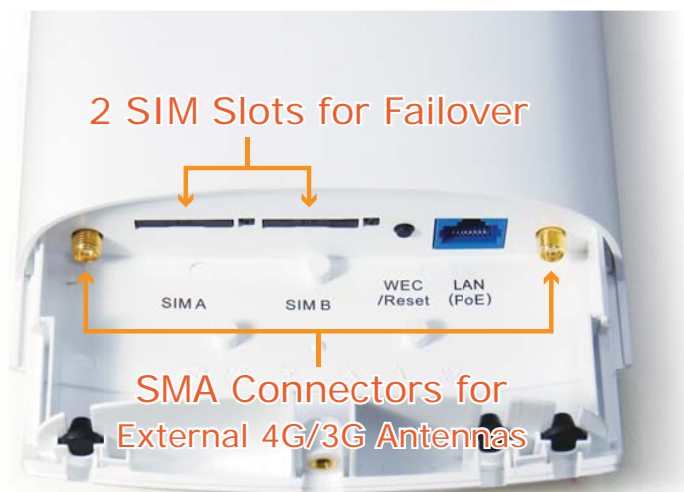
The large High Gain 4G/3G antenna provide exceptional connection quality to 4G/3G networks.

#### LAN Port and POE

Connect with IP Cameras and other networking devices via LAN Port. Power the device by POE



### Port and Connectors





## Dual High Gain Antennas

The AirMax4GW features high gain and high sensitivity 4G LTE antennas. So it can receive 4G or 3G mobile signal where normal mobile phone can not. In addition, it also has a high gain WiFi antenna which can send out wireless signal over large area. This is ideal for WISP applications for providing Internet service in remote village, camping site, or beach areas where wired or wifi connections are hard to reach.



## Dual SIM Card for Redudancy

It is important for service provider to provide uninterrupted service. In case of AirMax4GW, it comes with dual SIM Slots. So WISP providers can put 2 different SIM Cards for fail over. When one 4G service is down or too slow, it can switch to another service providers.



## Application Environments



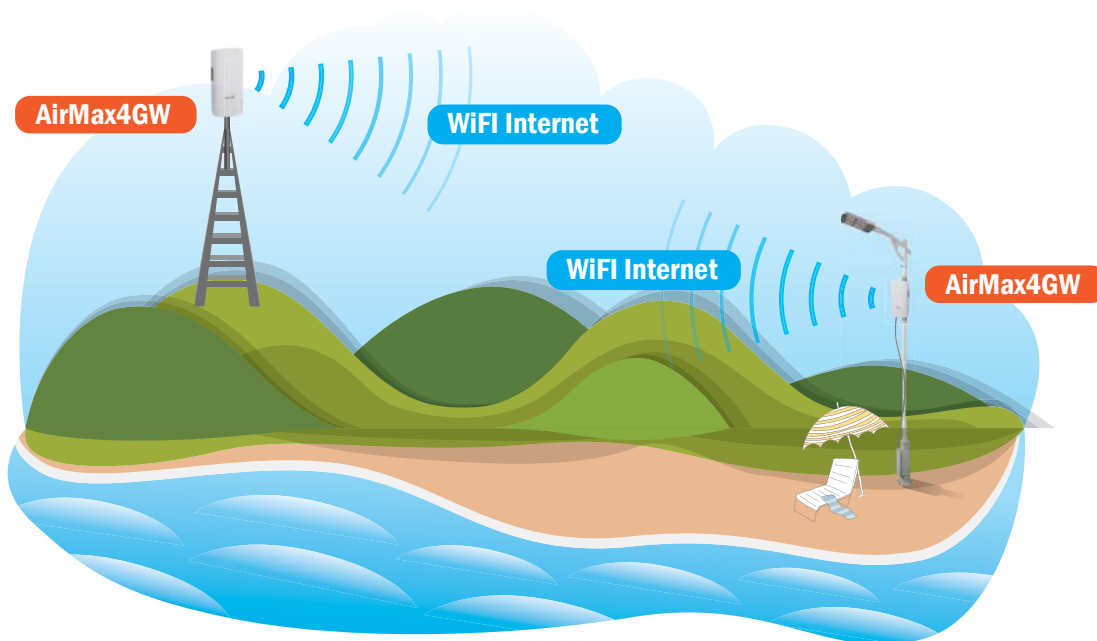
### Remote Villages

In remote area where it is too far from phone center to get ADSL connection, the AirMax4GW provides the easiest way for provide Internet service to the areas.



### Sea Side and High Mountain

In those areas where deployment of wired is expensive and intrusive, the AirMax4GW provides an immediate way for providing Internet services to the customers. When you need to provide Internet service these remote locations, the AirMax4GW is the easiest and most cost saving method for WISP operators





## Park, Camping Site, and Golf Course

In those areas where deployment of wired is expensive and intrusive, the AirMax4GW provides an immediate way for providing Internet services to the customers.



## Software Functions

The AirMax4GW has critical software features that are important for WISP applications.



### Captive Portal

The captive Portal function will redirect wireless users to a specific remote landing web page where provider can show their service information and request users to enter their login information.



Captive Portal Configuration	
Item	Setting
Captive Portal	<input checked="" type="checkbox"/> Enable
WAN Interface	WAN-1 ▼
LAN Subnet	DHCP-1 ▼
Authentication Server	External RADIUS Server ▼ Hotspot system ▼
UAM Server	<input checked="" type="checkbox"/> Enable Select from External Server List: hotspotsystem ▼

Save Refresh



### Remote Radius and UAM server

Operator can enter the remote Radius server information so when users try to login into the Internet service, they will be required to enter user name and password.





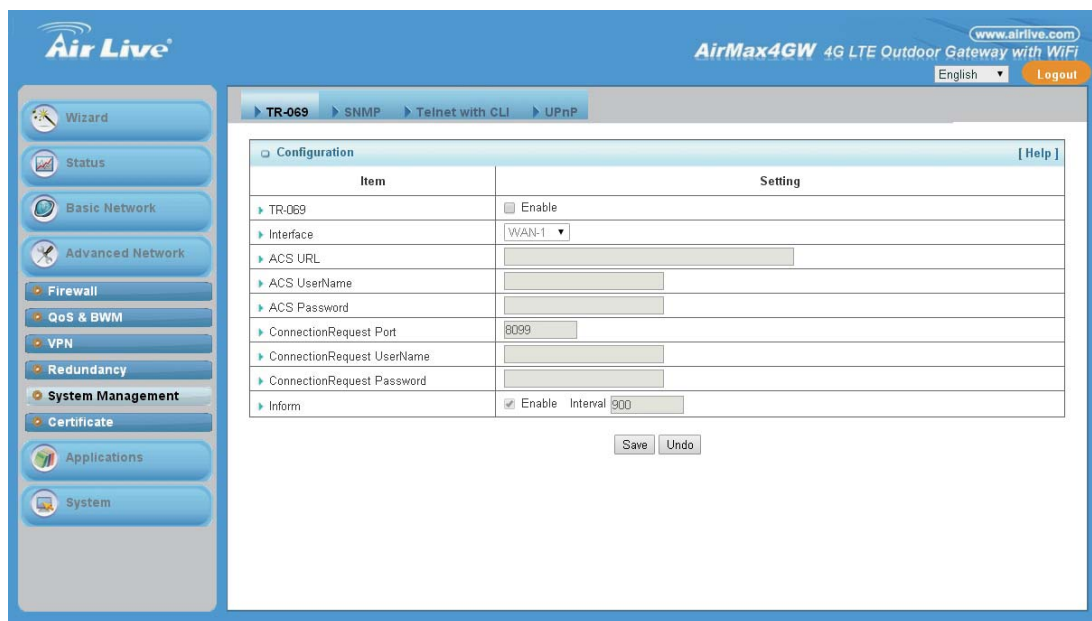
External Server Configuration	
Item	Setting
Server Name	hotspotsystem
Server IP/FQDN	hotspotsystem.com
Server Port	80
Server Type	UAM Server Login URL: <input type="text" value="https://customer.hotspotsys"/> Shared Secret: <input type="text" value="hotsys123"/> NAS/Gateway ID: <input type="text" value="Airlive"/> Location ID: <input type="text" value="1"/> Location Name: <input type="text" value="airlive"/>
Server	<input checked="" type="checkbox"/> Enable



## Versatile Management

The AirMax4GW can be managed via Web, TR069, SNMP, and CLI commands. It provides the WISP operators their preferred way for managing the device.



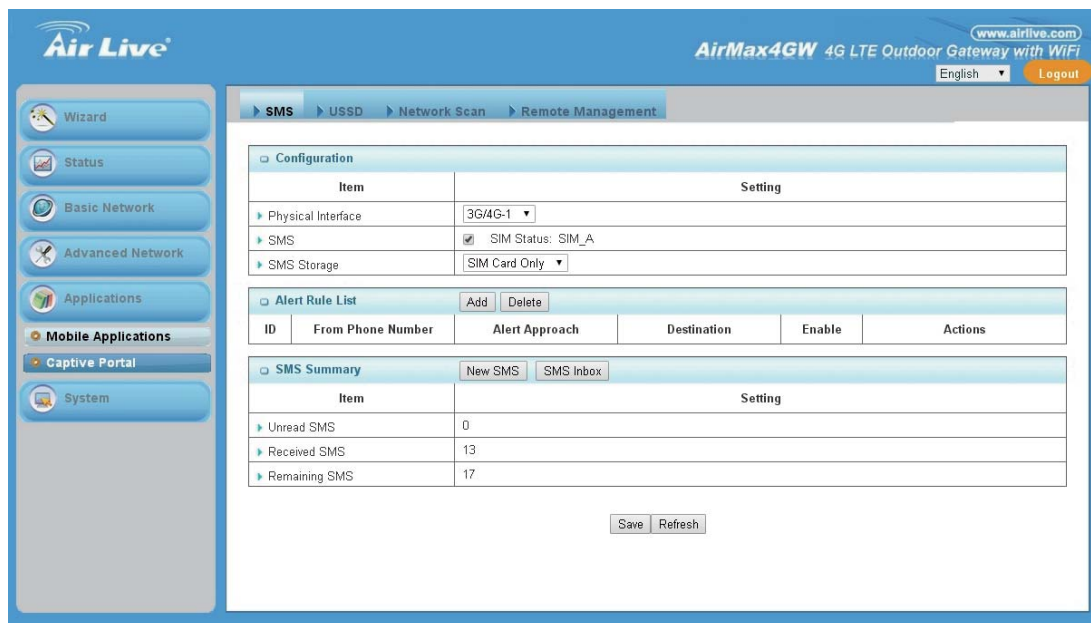


## SMS Short Message

The AirMax4GW allow the administrators to send basic commands and get status via SMS message. Therefore, the operators do not need to know the device's IP address and still able to do SIMple managements and check status with the AirMax4GW.







The screenshot shows the AirLive AirMax4GW web interface. The left sidebar contains navigation links: Wizard, Status, Basic Network, Advanced Network, Applications, Mobile Applications (selected), Captive Portal, and System. The main content area is titled 'SMS' and includes tabs for USSD, Network Scan, and Remote Management. The 'Configuration' section has a table with the following data:

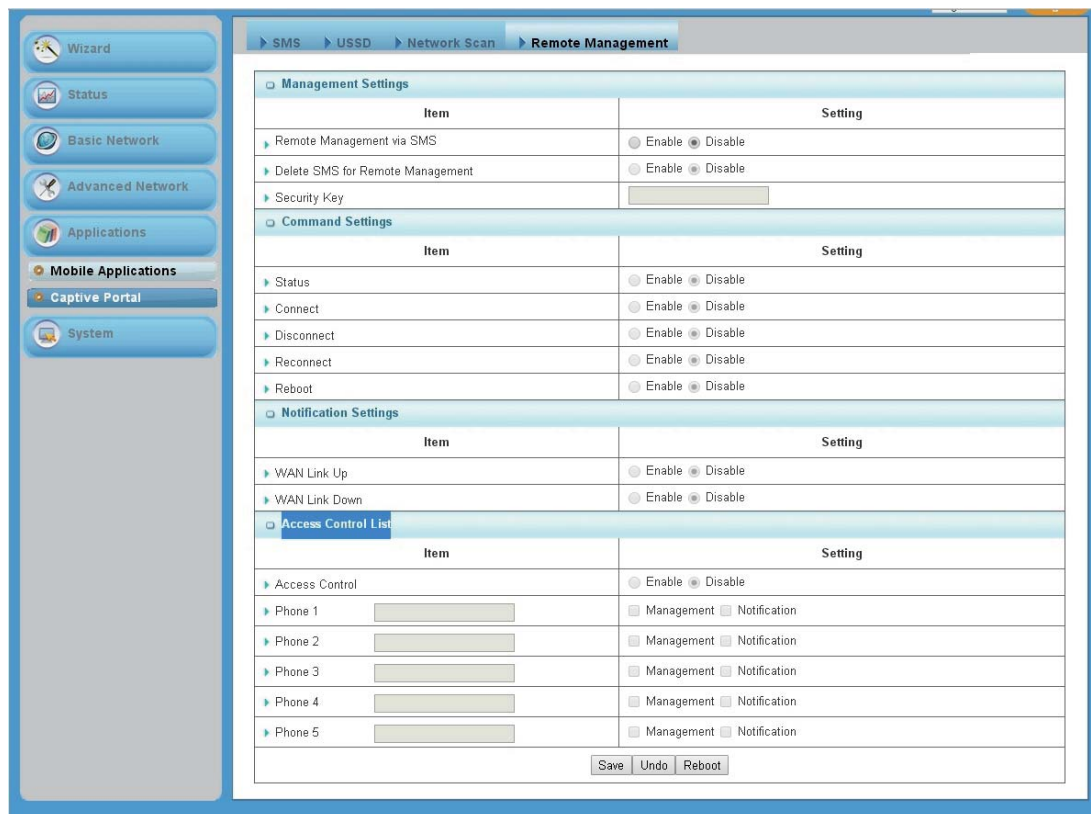
Item	Setting
Physical Interface	3G/4G-1
SMS	<input checked="" type="checkbox"/> SIM Status: SIM_A
SMS Storage	SIM Card Only

Below the configuration table is an 'Alert Rule List' section with 'Add' and 'Delete' buttons. It contains a table with columns: ID, From Phone Number, Alert Approach, Destination, Enable, and Actions. Below this is an 'SMS Summary' section with 'New SMS' and 'SMS Inbox' buttons. It contains a table with the following data:

Item	Setting
Unread SMS	0
Received SMS	13
Remaining SMS	17

At the bottom of the page are 'Save' and 'Refresh' buttons.

You can limit to accept SMS message commands only from specific phone numbers for security.



The screenshot shows the AirLive AirMax4GW web interface with the 'Remote Management' tab selected. The left sidebar is the same as the previous screenshot. The main content area is titled 'Remote Management' and includes tabs for SMS, USSD, Network Scan, and Remote Management. The 'Management Settings' section has a table with the following data:

Item	Setting
Remote Management via SMS	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Delete SMS for Remote Management	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Security Key	

Below this is the 'Command Settings' section with a table:

Item	Setting
Status	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Connect	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Disconnect	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Reconnect	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Reboot	<input type="radio"/> Enable <input checked="" type="radio"/> Disable

Below this is the 'Notification Settings' section with a table:

Item	Setting
WAN Link Up	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
WAN Link Down	<input type="radio"/> Enable <input checked="" type="radio"/> Disable

Below this is the 'Access Control List' section with a table:

Item	Setting
Access Control	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Phone 1	<input type="text"/> <input type="checkbox"/> Management <input type="checkbox"/> Notification
Phone 2	<input type="text"/> <input type="checkbox"/> Management <input type="checkbox"/> Notification
Phone 3	<input type="text"/> <input type="checkbox"/> Management <input type="checkbox"/> Notification
Phone 4	<input type="text"/> <input type="checkbox"/> Management <input type="checkbox"/> Notification
Phone 5	<input type="text"/> <input type="checkbox"/> Management <input type="checkbox"/> Notification

At the bottom of the page are 'Save', 'Undo', and 'Reboot' buttons.