

## AIMAX4GW 4G LTE + WiFi Outdoor Gateway

# **Telecom** Applications

WHITE PAPER



**OvisLink Corp.** www.airlive.com





### **Designed for Telecom Operator**

The AirMax4GW is a standalone 4G LTE outdoor gateway designed for Telecom operators to diversify their 4G/3G business models. By bridging 4G/3G connections with WiFi and Ethernet, it provides telecom operators new business opportunities to sell their LTE and UMTS bandwidth beyond the usual smartphone and tablet markets. In addition, the built-in 4G LTE modem is completely backward compatible with 3G UMTS, HSDPA, HSUPA, Edge, and GPRS standards.



#### Bridge between WiFi, Ethernet, and 4G/3G Networks

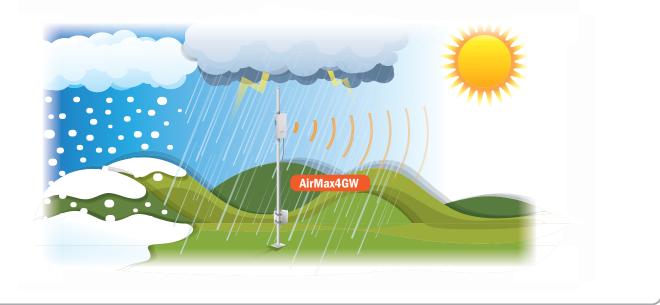
The AirMax4GW bridges the connections between WiFi, Ethernet, and the 4G/3G Mobile Network. It can connect any Wi-Fi or Ethernet equipped devices to the broadband Internet. Therefore, Telecom operators can extend their service to cover WiFi and Ethernet devices such as IP cameras, PC, notebooks, traffic controller, and much more.





#### Weatherproof Outdoor Deployment

The AirMax4GW is completely weather proof. That means it can be deployed in any location to provide Internet connectivity via 3G/4G network. In addition, the high gain LTE/UMTS antennas enable the AirMax4GW to receive weaker 4G/3G signal and distribute greater Wi-Fi signal than any mobile devices.













#### Dual High Gain Antennas

The AirMax4GW features high gain and high sensivity 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. There is also R-SMA antenna connectors for installing external 4G/3G antennas when you need better signal.





#### Dual Modem Model Available\*

The standard AirMax4GW is equipped with single 4G LTE modem with dual SIM slot for redundancy. A project based dual LTE modem model AirMax4GW-DM is available by request for Telecom operators that wish to double the available bandwidth to their customers. The AirMax4GW-DM can aggregate the bandwidth of 2 LTE connections through intelligent load balancing.



\*Minimum ordering quantity is required for the dual modem model, please contact AirLive sales for details.





### **Application Environments**



#### **Internet for Vacation Home and Cottages**

In many countries, people have vacation home or cottages in remote area where it is difficult to deploy wired Internet. The AirMax4GW is the best solution for Telecom operator to provide Internet service. AirMax4GW can be installed on the roof top where it can get the best 4G/3G signal reception, then bring the Internet signal through Ethernet cable to the home. Best of all, AirMax4GW's built-in 300Mbps MIMO Wi-Fi can provide wireless connectivity to the entire outdoor area for wireless IP cameras, notebook PC or tablets.





#### **Hotspot Deployment**

The AirMax4GW is the easiest way for Telecom provider to deploy Wi-Fi hotspot services. There is no limitation on wiring distance or location of Internet source. It is ready for deployment in any locations. Furthermore, it support 802.1X, UAM server, and URL redirection for easy integration with Telecom operator's authentication network.









#### **IP** Camera and Traffic Controller Installations

Whether it is on the remote site or in the city, IP camera and traffic controller installations can be made much simpler by using the AirMax4GW solution. AirMax4GW can bring any Ethernet or Wi-Fi equipped devices to the 4G/3G network, therefore, expanding the service and business model for the telecom operators.







#### Software Functions

The AirMax4GW has critical software features that are important for Telecom 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	C Enable
WAN Interface	WAN-1 V
LAN Subnet	DHCP-1 V
Authentication Server	External RADIUS Server V Hotspot system V
▶ UAM Server	✓ 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.







Item	Setting
Server Name	hotspotsystem
Server IP/FQDN	hotspotsystem.com
Server Port	80
▶ Server Type	UAM Server     •       Login URL:     https://customer.hotspotsys       Shared Secret:     hotsys123       NAS/Gateway ID:     Airlive       Location ID:     1       Location Name:     airlive



#### **Secured VPN Connection**

The AirMax4GW's VPN function provide secure video transmission over VPN encryption. Therefore, the operator's customers do not need to worry about leaking sensitive information and keep live video image from prying eyes. It provides opportunity for Telecom operators to offer secured video streaming service for enterprise customers.



Air Live'			AirMax4GW 4		English 🔹 🚺 Logo
Wizard	Configuration	PPTP L2TP GRE			
Status	Configuration				[Help]
	ltem		Setting		
Basic Network	▶ IPSec	🔲 Enable			
Advanced Network	NetBIOS over IPSec	Enable			
Advanced Network	NAT Traversal	Enable			
Firewall	Max. Concurrent IPSec Tunnels	32			
QoS & BWM	Tunnel List & Status	Add Delete Refresh			
VPN Redundancy	ID Interface Tunnel Scenario	Tunnel Remote Address	Gateway	Status	Enable Actions
System Management		Save	1		
Certificate					
Applications					
System					
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#### Policy Based Bandwidth QoS Firewall

AirMax4GW's enterprise class firewall can help Telecom provide to expand their service portfolio with their business and enterprise customers. It allows administrators control the user's access exactly as needed. You can define the bandwidth and QoS for each device and user to guarantee or limit the bandwidth.

Air Live		(www.airlive.com) AirMax4GW 4G LTE Outdoor Gateway with WiFi English • Logaut
Wizard	Configuration Rule-based OoS	
Status	System Resource Configuration	[Help]
	ltem	Setting
Basic Network	Total Priority Queues of All WANs	6
Advanced Network	WAN Interface	WAN - 1 •
Firewall	WAN Interface Resource	
QoS & BWM	ltem	Setting
VPN	Bandwidth of Upstream	150 Mbps •
Redundancy	Bandwidth of Downstream	150 Mbps •
System Management	<ul> <li>Total Connection Sessions</li> </ul>	30000
Certificate		Save Undo
Applications		
System		



#### **4GW Versatile Management**

The AirMax4GW can be managed via Web, TR069, SNMP, and CLI commands. The TR069 is especially designed for Telecom provider to centrally managed the AirMax4GW.







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Wizard	SMS USSD Netwo	rk Scan 🕨 Remote Manag	ement		English 💌
Status	Configuration				
	ltem		Setting	1	
Basic Network	Physical Interface	3G/4G-1 🔻			
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X Advanced Network	SMS Storage	SIM Card Only 🔻			
M Applications	Alert Rule List	Add Delete			
Mobile Applications	ID From Phone Number	Alert Approach	Destination	Enable	Actions
Captive Portal	SMS Summary	New SMS SMS Inbox			
System	Item		Setting	1	
	Unread SMS	0			
	Received SMS	13			
	Remaining SMS	17			
			Save Refresh		

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

Management Settings	
Item	Setting
twork Remote Management via SMS	Enable      Disable
	Enable Disable
A Network     Security Key	
Command Sattings	
s litem	Setting
tions	Enable  Disable
Status     Connect	Enable Disable
Connect      Disconnect	Enable Disable
Reconnect	Enable Disable
Reboot	Enable      Disable
Notification Settings	
Item	Setting
WAN Link Up	Enable  Disable
WAN Link Down	Enable  Disable
Access Control List	
Item	Setting
► Access Control	Enable Disable
Phone 1	Management Notification
Phone 2	Management Notification
> Phone 3	💿 Management 💿 Notification
> Phone 4	🔲 Management 📃 Notification
> Phone 5	🔲 Management 📄 Notification
	Save Undo Reboot