

Lumewave by Echelon

Gateway 2.0 Cellular (P/N 100141)

End User Cellular Activation Manual

Rev. A 3-14-2016

Revision	Date	Notes
А	3-14-2016	Initial Draft

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Introduction

This document provides details instructions to activate the cellular connection on a Lumewave by Echelon Cellular Gateway (Echelon P/N 100141). A cellular data plan for M2M is required. The Lumewave by Echelon Cellular Gateway is certified for use with most carriers.

It is recommended that the data plan selected utilizes a private IP address that is accessible via a VPN configured by your network provider.

Tools required

- 1. Desktop or Laptop (recommended) computer with an Ethernet port
- 2. CAT 5 patch cable
- 3. Torx T6 screwdriver (if installing SIM card)
- 4. Ethernet Gateway (P/N 100140)

CDMA:

- Step 1) Provide MEID from the cloudgate label located inside the enclosure to your Mobile Virtual Network Operator (MVNO) and add the MEID to a new or existing M2M data plan.
- Step 2) The network operator should provide you with the IP address associated with the MEID once it has been activated.
- Step 3) Proceed to Cellular Configuration Procedure

GSM

- Step 1) Your network provider will provide you with a SIM card, as well as the network information associated with the SIM card including; IP address, APN, and VPN connection details.
- Step 2) Install the SIM card in the Lumewave Radio module.

Install the SIM

For some UMTS and 3G operators, such as AT&T, T-Mobile and European operators, you must install a SIM card associated with the service plan.

TIP: For other wireless operators, such as Sprint or Verizon Wireless, make sure a service plan is associated with the device before continuing the installation.



To install the SIM:

Using a T6 Torx screwdriver, remove the four screws from the top plate on the back panel, and then remove the plate.

Insert the SIM into the SIM slot. Re-assemble the top cover plate and screws.

Important: The torque used to fix the screws of the cover plate should be set to any value between 30 and 50 Ncm. Any value above 50 Ncm might damage the screws!

Step 3) Proceed to Cellular Configuration Procedure

Cellular Configuration Procedure

MAKE SURE THAT THE COMPUTER USED IS NOT CONNECTED TO ANY OTHER NETWORK AND IT IS CONFIGURED TO RECEIVE IP ADDRESS FROM A DHCP SEVER.

Step 1. Connect one end of the Ethernet cable to the CloudGate.

Step 2. Connect the other end of the Ethernet cable to a computer. (See figure below)



network Connections

Step 3. Connect power adapter to the CloudGate and apply power.

At this point CloudGate will boot and system state led will turn orange. Wait until it turns green. Once it finishes booting up, the computer will have an active network connection with a valid IP address.

Step 4. Open a browser window and go to address http://192.168.1.1

A CloudGate page should be visible. This confirms a good Ethernet connection to the CloudGate. (See image below)

(-)(-) I ht File Edit View	tp://192.168.1.1/#/home F <u>a</u> vorites <u>T</u> ools <u>H</u> elp		,0 + →	LoudGate	×
Clo	oudGate	Connecting THINGS to the cloud			0 0 0 0 P T 0 0
F	Please login				
	Username Password				
		default username/password: admin/admin			
					Login

Step 5. Enter the following credentials to login to CloudGate web interface. Username: *admin* Password: *admin*

Step 6. Click on "Interfaces" menu item and then select "3G Connection" option.

🎤 🎴 https://192.168.1.1/#/ho	me	C Q Search	☆ 自 ♥ 🖡 🏫 🖻 ∕) 💩
CloudGa		connecting THINGS to the cloud	 ○ ○ ○ ○ P T I ○ ○ ○
A Home Interfaces ▼	Firewall	Connection Persistence Provisioning System VPN	
Connection 3G Connectio	n >	Home	
Settings	>	On this page you can view a summary of the settings of the gateway	
LAN interfaces	>		
VPN Tunnels	>	Connection status	
System Information	>		
Licenses	>	Connection status	
		Disconnected	
		Settings	
		Internet connection Yes No enabled	

🖉 闭 192.168.1.1/#/3g/gob	inet		😋 🔍 Search 🏫 🖨 🤝 🖓 🏦 🖉
	ate con	necting THINGS to the cloud	CO CO PTIO VIN
Connection status	>	MTU	1500 <u>A</u>
General	>	Note: when using an AT	&T SIM card select "AT&T", for all other wireless operators using SIM cards select "UMTS generic".
Network settings Data Counters	>	Radio firmware selection	Verizon Wireless UNTS Conner: A SIM requiring different radio firmware was detected
PIN Settings	>	Connection hunting	 Sprint AT&T Yes No
			Cancel Save changes
		Network settings	
		APN	wyless.com.attz
		Authentication method	Automatic PAP CHAP None

At this point settings on the **3G Connection** page should appears as below

Step 7. Scroll down to the "Radio Firmware Selection" area and select the appropriate radio firmware

- Select "Verizon Wireless" for Verizon CDMA
- Select "AT&T" for AT&T
- Select "Sprint" for Sprint
- Select "UTMS Generic" for all others.

Click "Save Settings"

Step 8. Under "Network Settings" enter the APN provided by your network operator in the APN field and click "Save Settings"

Step 9. The device will reboot

Verification of Network Settings

Step 10. Go to <u>http://192.168.1.1</u> and log in using the following credentials

Username = admin

Password = admin

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A Home Interfaces -	Firewall	Connection Persistence Provisioning System VPN		
Connection status	>	Home		
Settings	>	On this page you can view a summary of the settings of the gateway		
LAN interfaces	>			
/PN Tunnels	>	Connection status		
System Information	>			
Licenses	>	Connection status		
		Connected You are connected to the Internet through the interface 3G Connection Settings		
		Internet connection Yes No enabled		
		Connection strategy Manual Priority-based		

Configure VPN for cellular connection on PC

- Follow the network provider's instructions on how to configure the VPN Step 1) on the PC running the LumeStar software.
- Step 2) Connect to the VPN
- Step 3) Open the LumeStar software
- Step 4) Set the Network IP to the IP address provided by your network provider.
- Click "Apply" Step 5)
- The network should turn green Step 6)