



GLU194ST/GTC1000

LTE USB Dongle User Manual

V1.0

PLEASE READ THESE SAFETY PRECAUTIONS!

RF Energy Health Hazard



The radio equipment described in this guide uses radio frequency transmitters. Although the power level is low, the concentrated energy from a directional antenna may pose a health hazard. Do not allow people to come in close proximity to the front of the antenna while the transmitter is operating.

Disposal and Recycling Information



Pursuant to the WEEE EU Directive electronic and electrical waste must not be disposed of with unsorted waste. Please contact your local recycling authority for disposal of this product.

FCC Notice, USA

The USB Dongle units comply with Part 22/24/27/90 of the FCC rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received including interference that may cause undesired operation.

This device is specifically designed to be used under Part 15B, Subpart E of the FCC Rules and Regulations. Any unauthorized modification or changes to this device may void the user's authority to operate this device.

Furthermore, this device is intended to be used only when installed in accordance with the instructions outlined in this manual. Failure to comply with these instructions may also void the user's authority to operate this device and/or the manufacturer's warranty. FCC ID: S3kGLU194ST Find additional details within and at www.fcc.gov.

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1 Overview

The GLU194ST/GTC1000 is a high performance 4G LTE USB Dongle product designed to enable quick LTE mobile or fixed data service deployment to remote customers. It provides high data throughput and networking features to users who need both bandwidth and quality service in remote areas.



2 Getting Started

2.1 Package Contents

Upon opening the box, please unpack the product package carefully. Each product is shipped with the following items:

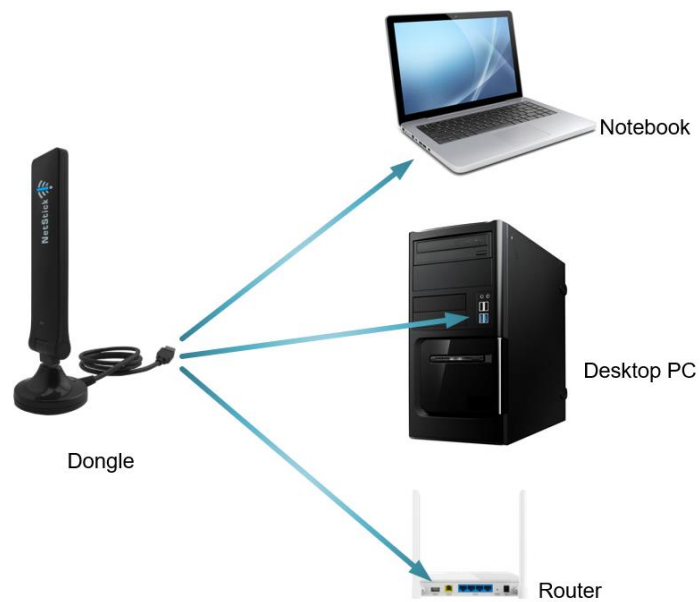
Products	Quantity
USB Dongle Unit	1
USB Cradle with Extension Cable (0.75m)	1
Quick Start Guide	1

If you find any of the items are missing, please contact customer service immediately.

2.2 Device Setup Using USB Cradle



Connect the dongle to the USB extension stand (cradle)



Connect the stand's USB cable to the network device USB port

2.3 Device Setup Using Direct Connection

Stand and extension cable is not used in this instance



2.4 LED Display

Color	Definition
Blinking Tri-color	Device self-diagnosis and ready to boot
Yellow	Device boot up in progress
Blinking Red	SIM card error detected
Blinking Green	Searching and connecting to the network
Solid Blue	LTE connected and strong Signal Strength
Solid Green	LTE connected and average Signal Strength
Blinking Yellow	LTE connected but antenna signal imbalance detected

3 Driver Software Installation

This device is intended to automatically install and register with the network without any user interaction required. See below for specific operating system scenarios.

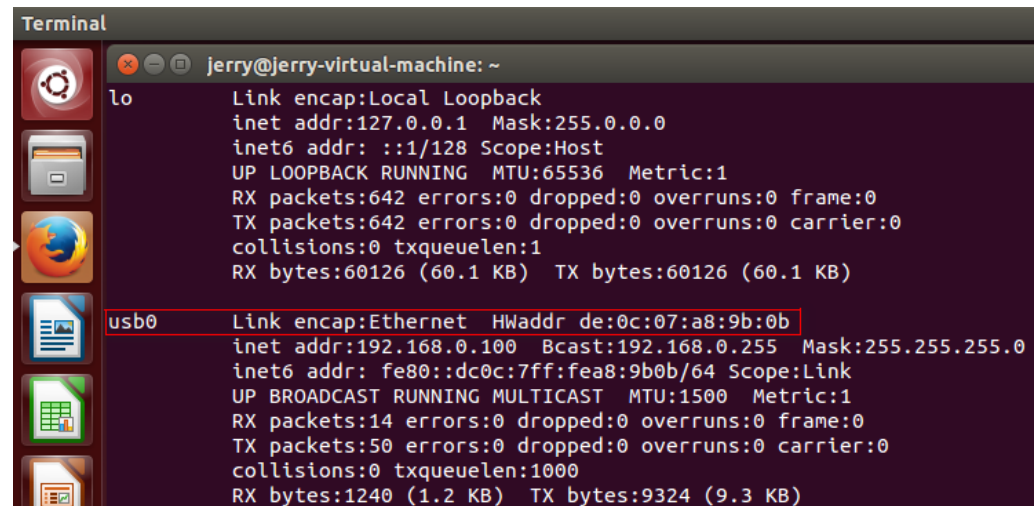
3.1 For Windows Users

When you plug in the device for the first time in a Windows machine, the Auto-Install program will start running automatically. You may see some updates in your status bar. Remote NSID appears in the network interface. Within approximately one minute the device's LED display should light up solid blue or solid green indicating a successful network connection, depending on strength.



3.2 For Linux Users

When you plug in the device for first time in a Linux machine, you do not need to install any drivers and “usb0” network interface appears. Within approximately one minute, the device's LED display should light up solid blue or solid green indicating a successful network connection, depending on signal strength.

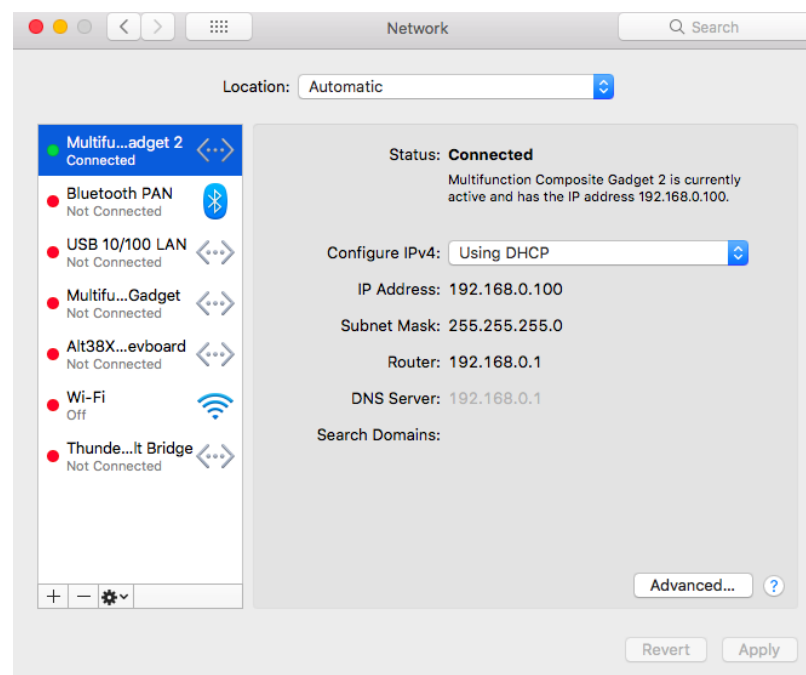


```
Terminal
jerry@jerry-virtual-machine: ~
lo      Link encap:Local Loopback
        inet addr:127.0.0.1  Mask:255.0.0.0
        inet6 addr: ::1/128 Scope:Host
        UP LOOPBACK RUNNING  MTU:65536  Metric:1
        RX packets:642 errors:0 dropped:0 overruns:0 frame:0
        TX packets:642 errors:0 dropped:0 overruns:0 carrier:0
        collisions:0 txqueuelen:1
        RX bytes:60126 (60.1 KB)  TX bytes:60126 (60.1 KB)

usb0    Link encap:Ethernet  HWaddr de:0c:07:a8:9b:0b
        inet addr:192.168.0.100  Bcast:192.168.0.255  Mask:255.255.255.0
        inet6 addr: fe80::dc0c:7ff:fea8:9b0b/64 Scope:Link
        UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
        RX packets:14 errors:0 dropped:0 overruns:0 frame:0
        TX packets:50 errors:0 dropped:0 overruns:0 carrier:0
        collisions:0 txqueuelen:1000
        RX bytes:1240 (1.2 KB)  TX bytes:9324 (9.3 KB)
```

3.3 For MAC OS Users

When you plug in the device for first time in a MAC OS machine, you don't need to install any driver, and Multifunction Composite Gadget appears in the network interface section of System Preferences. Within approximately one minute, the device's LED display should light up solid blue or solid green indicating a successful network connection, depending on signal strength.



4 User Device Management

4.1 User WEB Login

This product is designed to be Plug and Play. Users can, however, access the device's Web user interface to view system information, status and settings. Access the User Management portal using a Web browser, from a local computer with the NetStick connected to computers USB port. The user should ensure that the connected computer has acquired an IP address from the device. After IP connectivity is established between the computer and the dongle device, the user may launch a Web browser and enter <http://192.168.0.1> in the address bar. The default home page below will then appear. Menu navigation is located on the left of the screen.

System
System Info
Maintenance

LTE
Status
Setting
SIM PIN
OMA-DM

Global Telecom GLU194ST

This device is designed to enable quick and portable access to Internet. The WEB GUI is provided for user to quickly view operation status and configure necessary device setting.

Thank you for choosing our product and enjoy the convenience it offers!

4.2 System Information

This page is showing the device network information and the user can view the network interface configuration.

System
System Info
Maintenance

LTE
Status
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System Information

» Interfaces

Name	MAC	IP	NETMASK	Status	MTU
lte0pdn0	00:0a:3b:f0:00:00	0.0.0.0	0.0.0.0	DOWN	1500
br0	6c:ad:ef:fe:9c:28	192.168.0.1	255.255.255.0	UP	1500

» Gateway, Route, DNS

Default Gateway		Primary DNS	
Client IP	192.168.0.100	Secondary DNS	

4.3 LTE Information

This page shows the device LTE related information and link status.

System	» LTE Information			
System Info	Firmware	IMEI		
Maintenance	IMSI	ICC ID		
LTE	MAC Addr	Software Build		
Status	» LTE Status			
Setting	UICC State	UICC Ready	Connenction	Connected
SIM PIN	PDN Type	IPv4 & IPv6	Connected Time	1min 26 sec
OMA-DM	IP v4 Address	192.168.7.6	IP v6 Address	2001:7000:7000:2:2001:7000:7000:2
	PLMN Search	Success	MCC	432
	PLMN Selected	43244	MNC	44
	Physical CELL ID	2	CellGlobalID	432441A2D502
	RSSI	-66	RSRP	-92
	RSRQ	-11.0	SINR	-6
	Band	41	EARFCN	40540
	BandWidth	5MHZ	TXPower	10.0
	DLThr	52 bytes/sec	ServCellState	RRC CONNECTED
	ULThr	41 bytes/sec	Roaming State	Registered Home
	» LTE Statistics			
	Rx packets	52	Tx packets	104
	Rx bytes	16143	Tx bytes	9327

5 Advanced Device Management

This section is designed for system administrators and knowledgeable management users only. Please disregard unless otherwise instructed to do so by customer service or your network administrator.

5.1 Administrator Login

This product is designed to be Plug and Play. Administrators can, however, access the device's Web user interface to view system information, status and advanced settings. Access the User Management portal using a Web browser from a local computer with the NetStick connected to computers USB port. The user should ensure that the connected computer has acquired an IP address from the device. After IP connectivity is established between the computer and the dongle device, the user may launch a Web browser and enter <http://192.168.0.1/admin> in the address bar. A window will pop up requesting password. Input the user or administrator login password and then click the "Log in" button. After successful log on, the default home page will appear. Note the default administrator account is "admin" and password is "admin123".

System

System Info

Maintenance

LTE

Status

Setting

SIM PIN

OMA-DM

Global Telecom GLU194ST

This device is designed to enable quick and portable access to Internet. The WEB GUI is provided for user to quickly view operation status and configure necessary device setting.

Thank you for choosing our product and enjoy the convenience it offers!

Expand
Collapse

5.2 System Configuration

5.2.1 System Information

This page shows the device network information and network interface configuration.

System

System Info

Maintenance

LTE

Status

Setting

SIM PIN

OMA-DM

Network Information

» Interfaces

Name	MAC	IP	NETMASK	Status	MTU
lte0pdn0	00:0a:3b:f0:00:00	192.168.7.6	255.255.255.0	UP	1500
br0	6c:ad:ef:fe:9c:28	192.168.0.1	255.255.255.0	UP	1500
usb0	6c:ad:ef:fe:9c:28	0.0.0.0	0.0.0.0	UP	1500
lo	00:00:00:00:00:00	127.0.0.1	255.0.0.0	UP	65536

» Gateway, Route, DNS

Default Gateway	192.168.7.249	Primary DNS	10.3.0.30
Client IP	192.168.0.100	Secondary DNS	180.76.76.76

» DHCP / NAT

IP address	<input type="text" value="192"/> . <input type="text" value="168"/> . <input type="text" value="0"/> . <input type="text" value="1"/>
Subnet Mask	<input type="text" value="255"/> . <input type="text" value="255"/> . <input type="text" value="255"/> . <input type="text" value="0"/>
Gateway	<input type="text" value="192"/> . <input type="text" value="168"/> . <input type="text" value="0"/> . <input type="text" value="1"/>
DHCP Address Allocation	<input type="text" value="192"/> . <input type="text" value="168"/> . <input type="text" value="0"/> . <input type="text" value="100"/> ~ <input type="text" value="192"/> . <input type="text" value="168"/> . <input type="text" value="0"/> . <input type="text" value="100"/>

5.2.2 Maintenance

This page allows user to performance maintenance operation on the device. The user can change the device operation from the default router mode to IP Pass-through mode where the connected networking device will obtain public IP directly from the network. The user can also update the device software build version, reset to factory settings, and reboot or restart the device.

System

System Info

Maintenance

LTE

Status

Setting

SIM PIN

OMA-DM

Expand Collapse

Maintenance

» IP Passthrough

Mode Off ▼ Apply

» Password Change

New Password

Re-enter to Confirm Apply

» Device Local Software Build Update

Filename Choose File No file chosen

Status Please select the upgrade file Update

Note: Upgrade file should have the PRG file extension.

» Remote Software Build Update(FOTA)

Status Update

» Factory Reset

Reset all settings to factory default values Apply

» Reboot the system

It takes about 45 seconds to reboot the system Reboot

5.3 LTE Configuration

5.3.1 LTE Status

This page shows the device LTE related information and link status.

System

System Info

Maintenance

LTE

Status

Setting

SIM PIN

OMA-DM

Expand Collapse

LTE Information

» LTE Information

Firmware		IMEI	
IMSI		ICC ID	
MAC Addr		Software Build	

» LTE Status

UICC State	UICC Ready	Connenction	Connected
PDN Type	IPv4 & IPv6	Connected Time	1min 30 sec
IP v4 Address	192.168.7.6	IP v6 Address	2001:7000:7000:2:2001:7000:7000:2
PLMN Search	Success	MCC	432
PLMN Selected	43244	MNC	44
Physical CELL ID	2	CellGlobalID	432441A2D502
RSSI	-65	RSRP	-86
RSRQ	-7.0	SINR	30
Band	41	EARFCN	39790
BandWidth	5MHZ	TXPower	-27.8
DLThr	0 bytes/sec	ServCellState	RRC CONNECTED
ULThr	0 bytes/sec	Roaming State	Registered Home

» LTE Statistics

Rx packets	93	Tx packets	212
Rx bytes	31374	Tx bytes	32605

5.3.2 LTE Setting

This page allows user to reconnect the LTE wireless link and configure the device LTE roaming settings.

System

System Info

Maintenance

LTE

Status

Setting

SIM PIN

OMA-DM

Expand Collapse

LTE Setting

» LTE Reconnect **Reconnect**

» Roaming

Mode Roaming Disabled ▼

Caution: When Domestic Only or International and Domestic Roaming is enabled, additional charges may apply!

Apply

» LTE APN

Index	APN Name	IP Type	Auth
1	otasn	IPv4	PAP
2	r.ispsn	IPv4v6	PAP

» Support Band

Index	Num of Value	Band
1	3	25,26,41
2	5	2,4,5,12,71

5.3.3 SIM PIN

The SIM card menu is used to view the SIM card status and perform PIN code management for SIM card.

System

System Info

Maintenance

LTE

Status

Setting

SIM PIN

OMA-DM

Expand Collapse

LTE SIM PIN

» PIN Information

PIN Status	PIN DISABLED
RETRIES PIN	3
RETRIES PUK	10

Refresh

» PIN Management

PIN Code

Verify **Enable** **Disable**

» PIN Change

PIN Code

New PIN Code

Confirm New PIN Code

Change

» PIN Unblock

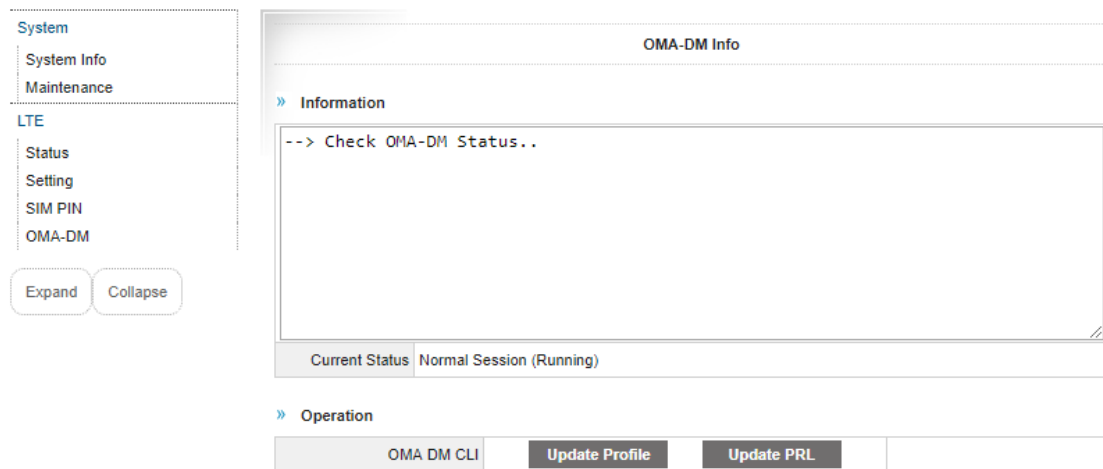
PUK Code

New PIN Code

Unblock

5.3.4 OMA-DM

This page allows user to check for the latest LTE Profile and PRL updates.



5.4 UICC/SIM Unlock

The device is configured to lock the Sprint UICC/SIM by default. However, users can change the default setting to use other international operator UICC/SIM cards. To change the UICC SIM Lock setting, users need to Telnet to the device from the USB port at 192.168.0.1 and login using the user name "root" and password "root123".

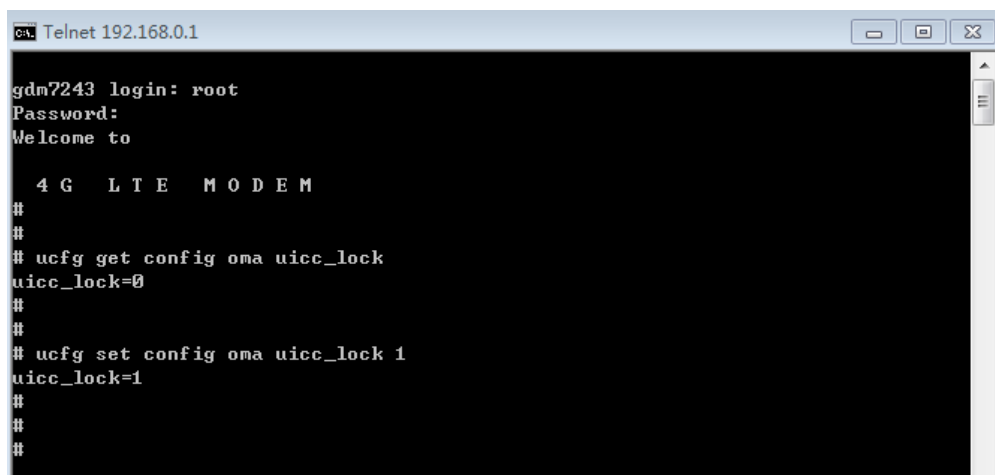
Use the following command to get and set the UICC/SIM Lock setting:

```
# ucfg get config oma uicc_lock
```

```
# ucfg set config oma uicc_lock [0 or 1]
```

If uicc_lock_level is "0", the device can only support Sprint UICC/SIM. The UICC lock is set to 0 by default.

If uicc_lock_level is "1", the device can support any international UICC/SIM and Sprint Domestic UICC/SIM cards. The change setting example is shown below.



6 FAQ's and Troubleshooting

Q: The LED does not light up when your device is connected to the computer.

[ANSWER] Please check your USB port and make sure that it is functioning properly. If it is not, try a different USB port on your computer.

Q: The LED keeps flashing (Green) even though your device is connected to the computer.

[ANSWER] Please check and make sure you are within LTE coverage.

Q: Unable to connect to internet while the device is already connected to LTE network.

[ANSWER] Please check and verify your computer has the proper USB virtual networking adapter installed. Unplug the device and reconnect again if required.

Q: How do I know if my device has connected to the LTE network?

[ANSWER] If the LED is solid green, then LTE network connection is established.

Q: When should I use the stand with extension cable with my device?

[ANSWER] If it is difficult to connect the dongle unit directly, you can use the stand with extension cable to connect.

Q: My device LED is blinking yellow. What should I do?

[ANSWER] The yellow blinking LED indicates there is antenna signal imbalance, you may adjust the dongle position or placement to improve the signal reception.

Q: My device LED is blinking red. What should I do?

[ANSWER] The red blinking LED indicates there is a problem with the SIM card. Please check if the SIM card is valid and properly inserted.

For help with your device or if you have any questions, please call technical support at 1-844-450-0841 from 8:30am-6:30pm ET, Monday-Friday.