



GLU194ST

LTE USB Dongle
Quick User Guide 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.

NOTE : This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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.

FCC Radiation Exposure Statement:

This device meets the government's requirements for exposure to radio waves. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons regardless of age or health. The SAR limit of USA (FCC) is 1.6 W/kg averaged. Device types: LTE USB Dongle (FCC ID: S3KGLU194ST) has also been tested against this SAR limit. SAR information on this and other pad can be viewed on-line at <http://www.fcc.gov/oet/ea/fccid/>. Please use the device FCC ID number for search. This device was tested simulation typical 5mm to body. To maintain compliance with FCC RF exposure requirements, the use of holsters and similar accessories should not contain metallic components in its assembly; the use of accessories that do not satisfy these requirements may not comply with FCC RF exposure requirements, and should be avoided.

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1. Overview

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



1.1. User Interface Specification

Model	Description & User Interface
GLU194ST	- 1 USB 2.0 (RNDIS, CDC-ECM, CDC-ECM, CDC-ACM) - 1 LED (Tri-color) - USB 2.0, Power < 3 Watts (Average) - Dimensions: 160 mm (L) × 40 mm (W) × 16 mm (D) - Weight: 120g - Operating Temperature: -15°C to 40°C - Storage Temperature: -20°C to 70°C - Humidity 5% to 95%

1.2. LTE Interface Specification

Frequency Bands	Band: B25, B26, B41
Radio Access	3GPP LTE Release 9
Operation Mode	TDD or FDD, 2RX, 1TX, DL MIMO
Output Power	23dBm
Throughput	Category 4
SIM Support	SIM card slot (4FF)

2. Getting Started

2.1. Packing list and CPE Unit

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

Table 2-1 Packing List

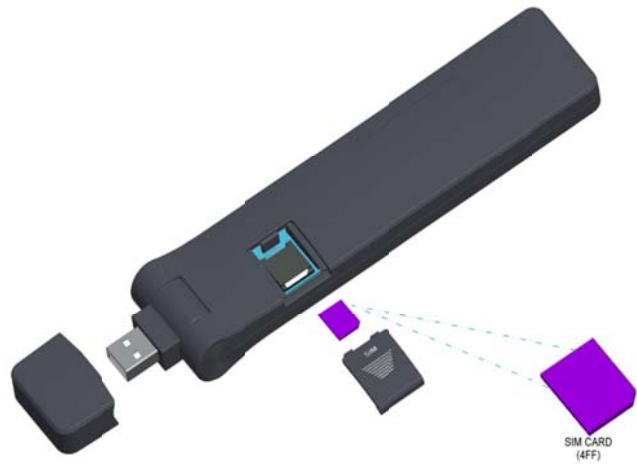
Products	Quantity
USB dongle Unit	1
USB extension cord and stand (0.75m)	1
Quick user guide	1

If you find any of the items missed, please contact your local distributor immediately.

2.2. Installing the Equipment

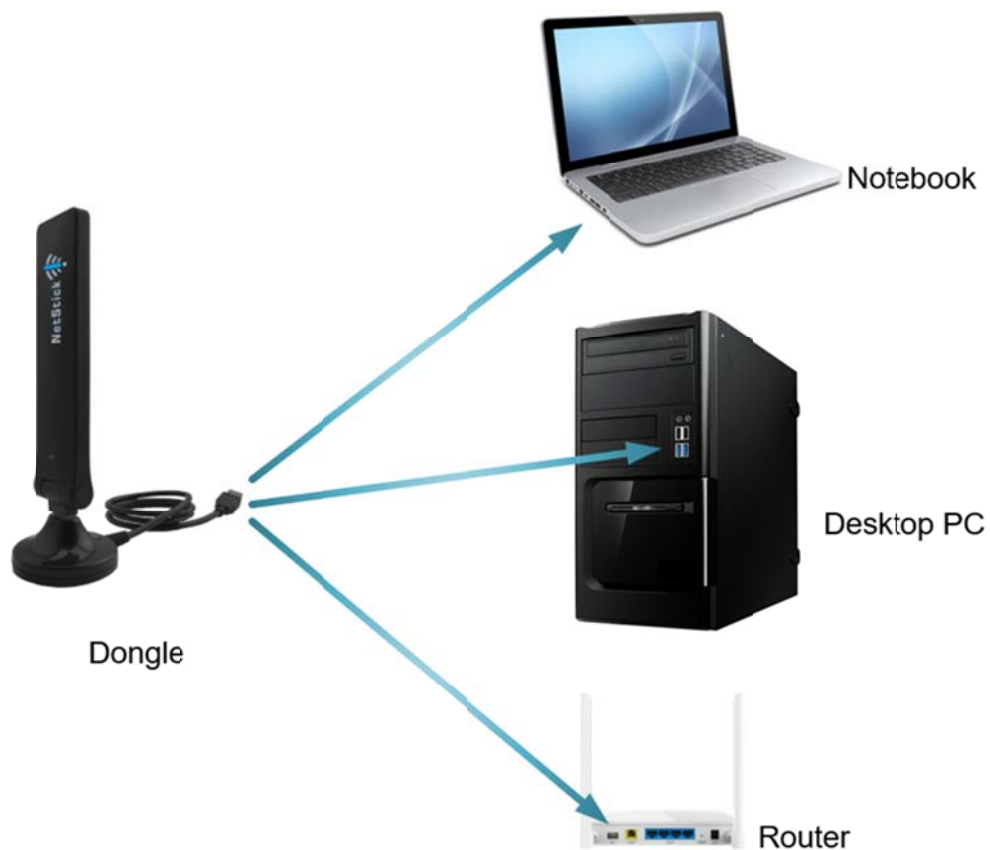


Connect the dongle to USB extension
CARD



Stand Insert the SIM

- Connected to the network device USB port



- Device logic connection



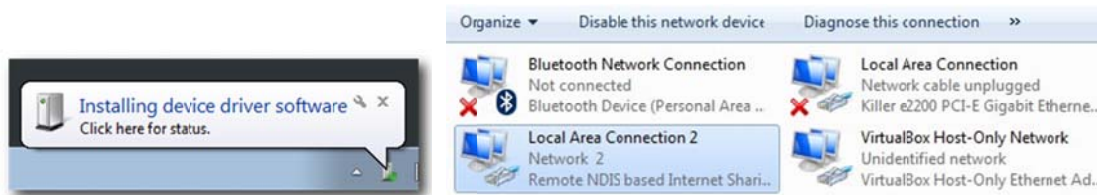
■ LED Display

Color	Definition
Tri-color Blinking	Device self-diagnosis and ready to boot
Yellow	Device boot up in progress
Red Blinking	SIM card error detected
Green Blinking	Searching and connecting to the network
Solid Blue	LTE connected and LTE signal RSRP>-95dBm
Solid Green	LTE connected and LTE signal RSRP<-95dBm
Yellow Blinking	LTE connected but antenna signal imbalance detected

3. Driver Software Installation

■ Windows

When you plug in the device first time in a Window machine, the Auto-Install program will start running automatically and appears NDIS interface.



■ Linux

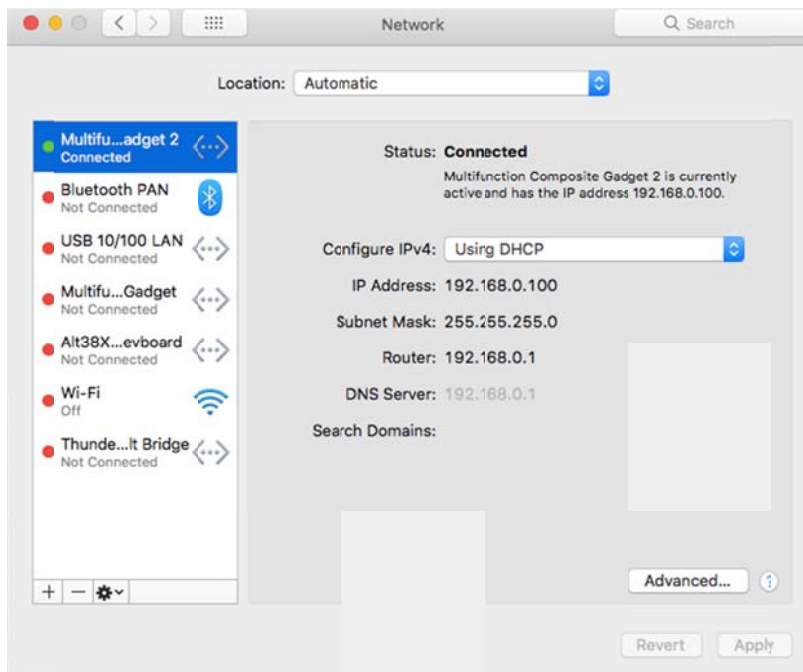
When you plug in the device first time in a Linux machine, don't need to install any driver and appears "usb0" network interface.

```
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)
```

■ MAC OS

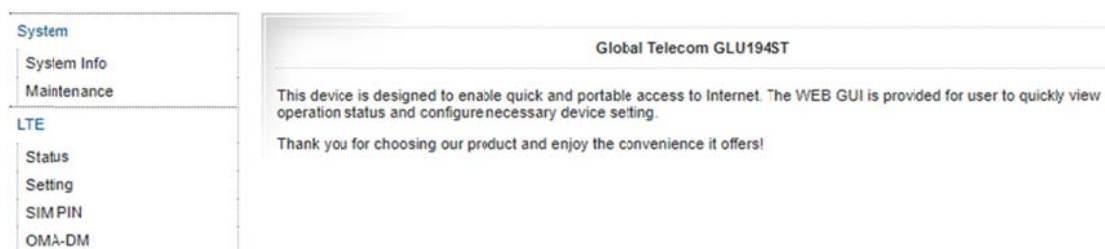
When you plug in the device first time in a MAC OS machine, don't need to install any driver and appears eth network interface.



4. Managing Dongle Device

4.1 WEB Login

User can access the dongle management GUI using a Web browser from a local PC connected to device USB port. The user should ensure that the connected PC have acquired IP address via DHCP from the device. After IP connectivity is established between the PC and dongle device, the user may launch a Web browser and specify <http://192.168.0.1> in the address bar, the default home page will appear.



4.2 System configuration

■ Network Information

This page is showing the device network information and the user can change the network interface config.

System

System Info

Maintenance

LTE

Status

Setting

SIM PIN

OMA-DM

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:e1: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	

■ Maintenance

This page allows user to update the device firmware version, rest the device to factory setting and reboot the device.

System

System Info

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Maintenance

» IP Passthrough

Mode Off

» Device Local Firmware Update

Filename Choose File No file chosen

Status Please select the upgrade file

Note: Upgrade file should have the PRG file extension.

Update

» Remote Firmware 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

4.3 LTE configuration

■ LTE Information

This page showing the LTE information.

System

System Info

Maintenance

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SIM PIN

OMA-DM

LTE Information

» LTE Information

Firmware		IMEI	
IMSI		ICC ID	
MAC Addr		Load Build	

» LTE Status

UICC State	UICC Ready	Connexion	Connected
PDN Type	IPv4	Connecter Time	24 sec
IP v4 Address	192.168.3.2	IP v6 Address	N/A
PLMN Search	Success	MCC	432
PLMN Selected	43244	MNC	44
Physical CELL ID	2	CellGlobalID	432441A2D002
RSSI	-82	RSRP	-104
RSRQ	-7.0	SINR	13
Band	41	EARFCN	40090
BandWidth	5MHZ	TXPower	-21.3
DLThr	0 bytes/sec	ServCellState	RRC CONNECTED
ULThr	104 bytes/sec	Roaming State	Roaming - Roaming charge may apply!

» LTE Statistics

Rx packets	1	Tx packets	37
Rx bytes	72	Tx bytes	2002

■ LTE Setting

This page allows user to configure the LTE setting.

System

System Info

Maintenance

LTE

Status

Setting

SIM PIN

OMA-DM

LTE Setting

» LTE Reconnect

Reconnect

» Roaming

Mode On

Apply

» LTE APN

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

■ SIM PIN

The SIM card menu is used to view the SIM card status.

LTE SIM PIN	
» PIN Information	
PIN Status	PIN DISABLED
RETRIES PIN	3
RETRIES PUK	10
Refresh	

■ OMA-DM

This page allows user to LTE FOTA test.

LTE FOTA Test Page	
» Information	
--> Check OMA-DM Status..	
Current Status	Normal Session (Running)
» Operation	
OMA DM CLI	Update Profile Update PRL
MSL Code	

5. Troubleshooting

Q1: The LED does not light up when your device connected to host computer.

- Check your USB port and make sure that it is functioning properly. If it is not, try a different USB port.

Q2: The LED keeps flashing even though your device is connected to PC.

- Check and make sure you are within LTE coverage.

Q3: Unable to connect internet while the device is already connected to LTE network.

- Check and verify your computer has the USB proper virtual networking adapter installed and enabled. Unplug the device and reconnect again if required.