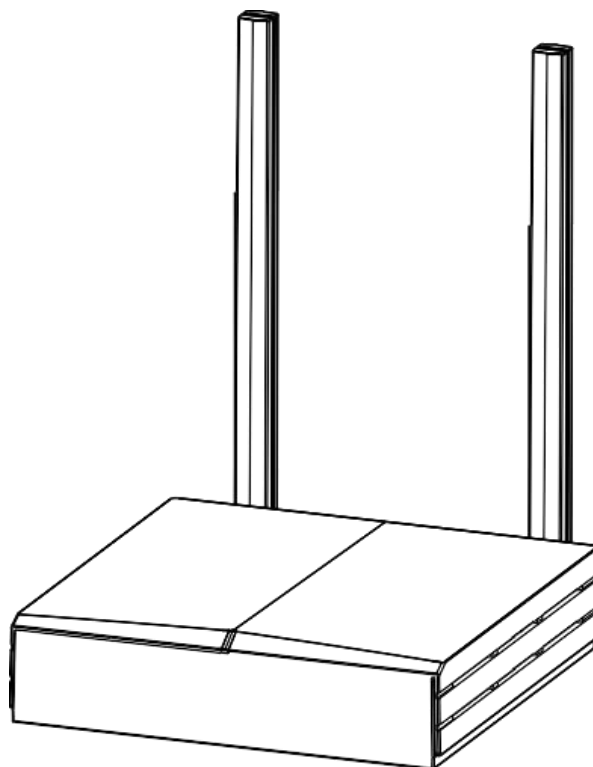


G200

USER MANUAL



EasyLinkIn
Sensing the World

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1. PRODUCT OVERVIEW

1.1 Brief Introduction

G200 series gateway is a portable indoor gateway and complies with LoRaWAN™ protocol to provide low power, stable and secure wireless connectivity for devices and sensors.

G200 adopts star topology deployment and provide WiFi, 4G or Ethernet connection to network server.

The gateway is used in a wide area of applications such as smart energy, smart cities and smart agriculture etc.

G200 meets the network requirements of long-range communications, strong anti-interference ability, high sensitivity and low power for many dispersed sensors to provide a low cost and high reliability indoor IoT solution.



1.2 Features

- Low Cost

Compact and portable, easy to install, cost effective for LoRa network deployment.

- Stable Network

The legal nodes can move freely within gateway coverage. When one gateway is abnormal in the multi-gateway

network, nodes can access network through adjacent gateway.

- Multiple Backhaul Options

Support 4G/Ethernet/WiFi which switch dynamically.

- Easy Maintenance

Support remote troubleshooting and firmware upgrades, support local connection for debugging.

2. INTERFACE AND LED

2.1 Interface



Port 1: LoRa Antenna (SMA-female)

Port 2: RESET

Port 3: SIM Card Slot

Port 4: Micro USB

Port 5: Ethernet (RJ45)

Port 6: DC12V DC_IN

Port 7: 4G/WiFi Antenna (SMA-female)

Note :

Port 2: RESET, long press the RESET button for about 6 seconds, release it and G200 restore factory settings.

2.2 LED Status Indications

LED	Function definition
Blue and green flash every 1 second	<ul style="list-style-type: none"> • Normal NS connection • Normal data forward
Red and blue flash every 1 second	<ul style="list-style-type: none"> • Abnormal NS connection • Normal data forward
Red flash every 1 second	<ul style="list-style-type: none"> • Abnormal NS connection • Abnormal data forward
White lights up for 1 minute	Gateway power on, system initialization
Off	Gateway is not powered on

3. SPECIFICATION

LoRa Parameters	
Frequency Band	470MHz/868MHz/915MHz/923MHz
Communication	LoRaWAN, Star Network
Modulation	LoRa/FSK
Mode	Half duplex

Sensitivity	-137dBm @SF12/BW 125KHz
Transmit Power	17 dBm (Typical)
Bandwidth	125KHz/250KHz/500MHz Configurable
Uplink	Ethernet/WiFi/4G
Communication Distance	Suburban 5Km, urban 3Km
Physical	
IP Grade	IP30
Size	142mm*142mm*35mm
Color	Off white
Material	PC+ABS
Input Voltage	DC12V(11.0 VDC ~ 14.0 VDC)
Installation	Desktop/Wall mount/Ceiling mount
Operating Temperature	0-60°C
Operating Humidity	0-90%RH
Heat Dissipation	Radiator grille
Hardware	
Processor	MIPS 550MHz
RAM	128MB RAM
Flash	16MB
WiFi	QCA9513
Security System	
System Encryption	AES128
Remote Management	
OS	Open WRT
Upgrade and Maintenance	Remote monitoring of network status
	Support remote firmware upgrade, configuration backup and recovery

4. CONFIGURATION

G200 provides a friendly and easy way to configure network parameters and LoRa parameters. After the configuration/modification is completed, you need to click the **Save & Apply** button at the bottom right of the page. After all the configuration/modifications are completed, you need to restart the gateway to take effect.

4.1 Getting Started

Please follow the steps below to log in:

Step 1: Search AP **ELI-G200-XXXXXX**(XXXXXX is the last six hex number of G200 MAC) for G200, password: easylinkin, click to connect.

Step 2: If connection is successful, open browser (recommend IE browser) and input IP

address:192.168.3.1

Step 3: After entering login page, input username and password. Then enter the overview page as shown below.

Username: admin (default) Password: admin default)

Status, System, Service, Network, Apn, LoRa and Logout tabs are displayed at the top of the page. If you want to change the initial login password, please click **System-Administration** then input the new password and click Save & Apply button.

EasyLinkin | QSDK Premium Beeliner Router QCA9558.LN | Load: 0.91 0.48 0.20 Changes: 0

Status **System** Services Network Apn Lora Logout

System **Administration** Software Startup Scheduled Tasks LED Configuration Backup / Flash Firmware Reboot

Router Password

Changes the administrator password for accessing the device

Password	<input type="password"/>	
Confirmation	<input type="password"/>	

4.2 Modifying Network Parameters

Please follow below steps to modify network parameters:

Step1: Click **Network-Interface**, Ethernet and WiFi configuration can be found in this page.

EasyLinkin | QSDK Premium Beeliner Router QCA9558.LN | Load: 0.33 0.39 0.19 | Auto Refresh: on Changes: 0

Status System Services **Network** Apn Lora Logout

Interfaces Wifi Switch DHCP and DNS Hostnames Static Routes Firewall Diagnostics

Interfaces

Interface Overview

Network	Status	Actions
WWAN0 wwan0	Uptime: 0h 0m 0s MAC-Address: 26:18:77:34:07:D6 RX: 0.00 B (0 Pkts.) TX: 30.26 KB (84 Pkts.)	
LAN br-lan	Uptime: 0h 3m 57s MAC-Address: 38:E2:6E:0C:88:4B RX: 81.78 KB (962 Pkts.) TX: 459.75 KB (851 Pkts.) IPv4: 192.168.3.1/24	
WAN eth0	Uptime: 0h 0m 0s MAC-Address: 38:E2:6E:0C:88:4C RX: 0.00 B (0 Pkts.) TX: 0.00 B (0 Pkts.)	
WWAN br-wwan	Uptime: 0h 3m 17s MAC-Address: DE:B2:9A:FC:82:29 RX: 27.37 KB (225 Pkts.) TX: 42.26 KB (264 Pkts.) IPv4: 192.168.0.106/24	

Add new interface...

Step 2: Click **WAN-Edit**, the General Setup (Ethernet static IP configuration or DHCP configuration) can be modified. The default configuration is DHCP mode.

EasyLinkin | QSDK Premium Beeline Router QCA9558.LN | Load: 0.26 0.37 0.18 | Auto Refresh: **on** Changes: 0

Status System Services **Network** Apn Lora Logout

Interfaces Wifi Switch DHCP and DNS Hostnames Static Routes Firewall Diagnostics

WAN WWAN WWAN0 LAN

Interfaces - WAN

On this page you can configure the network interfaces. You can bridge several interfaces by ticking the "bridge interfaces" field and enter the names of several network interfaces separated by spaces. You can also use VLAN notation INTERFACE.VLANNR (e.g.: eth0.1).

Common Configuration

General Setup **Advanced Settings** Physical Settings Firewall Settings

Status

Uptime: 0h 0m 0s
MAC-Address: 38:E2:6E:0C:88:4C
eth0 RX: 0.00 B (0 Pkts.)
TX: 0.00 B (0 Pkts.)

Protocol **DHCP client**

Hostname to send when requesting DHCP EasyLinkin

Accept router advertisements ☒

Reset Save Save & Apply

Step 3: Use gateway metric need to be set 5 in DHCP mode.

EasyLinkin | QSDK Premium Beeline Router QCA9558.LN | Load: 0.26 0.37 0.18 | Auto Refresh: **on** Changes: 0

Status System Services **Network** Apn Lora Logout

Interfaces Wifi Switch DHCP and DNS Hostnames Static Routes Firewall Diagnostics

WAN WWAN WWAN0 LAN

Interfaces - WAN

On this page you can configure the network interfaces. You can bridge several interfaces by ticking the "bridge interfaces" field and enter the names of several network interfaces separated by spaces. You can also use VLAN notation INTERFACE.VLANNR (e.g.: eth0.1).

Common Configuration

General Setup **Advanced Settings** Physical Settings Firewall Settings

Bring up on boot ☒

Use broadcast flag ☐ Required for certain ISPs, e.g. Charter with DOCSIS 3

Use default gateway ☒ If unchecked, no default route is configured

Use DNS servers advertised by peer ☒ If unchecked, the advertised DNS server addresses are ignored

Use gateway metric **5**

Client ID to send when requesting DHCP

Vendor Class to send when requesting DHCP

Override MAC address 38:E2:6E:0C:88:4C

Override MTU 1500

Reset Save Save & Apply

Step 4: Set up static IP address.

EasyLinkin | QSDK Premium Beeline Router QCA9558.LN | Load: 0.26 0.37 0.18 | Auto Refresh: **on** | Changes: 0

Status System Services **Network** Apn Lora Logout

Interfaces Wifi Switch DHCP and DNS Hostnames Static Routes Firewall Diagnostics

WAN WWAN WWANO LAN

Interfaces - WAN

On this page you can configure the network interfaces. You can bridge several interfaces by ticking the "bridge interfaces" field and enter the names of several network interfaces separated by spaces. You can also use **VLAN** notation **INTERFACE.VLANNR** (e.g.: eth0.1).

Common Configuration

General Setup

Status

Uptime: 0h 0m 0s
MAC-Address: 38:E2:6E:0C:88:4C
eth0 RX: 0.00 B (0 Pkts.)
TX: 0.00 B (0 Pkts.)

Protocol Static address

Really switch protocol? ☒ Switch protocol

Reset Save Save & Apply

EasyLinkin | QSDK Premium Beeline Router QCA9558.LN | Load: 0.36 0.37 0.20 | Auto Refresh: **on** | **Unsaved Changes: 4**

Status System Services **Network** Apn Lora Logout

Interfaces Wifi Switch DHCP and DNS Hostnames Static Routes Firewall Diagnostics

WAN WWAN WWANO LAN

Interfaces - WAN

On this page you can configure the network interfaces. You can bridge several interfaces by ticking the "bridge interfaces" field and enter the names of several network interfaces separated by spaces. You can also use **VLAN** notation **INTERFACE.VLANNR** (e.g.: eth0.1).

Common Configuration

General Setup **Advanced Settings** Physical Settings Firewall Settings

Status

Uptime: 0h 0m 0s
MAC-Address: 38:E2:6E:0C:88:4C
eth0 RX: 0.00 B (0 Pkts.)
TX: 0.00 B (0 Pkts.)

Protocol Static address

IPv4 address 172.16.10.123

IPv4 netmask 255.255.255.0

IPv4 gateway 172.16.10.1

IPv4 broadcast

Use custom DNS servers 172.16.10.1

Accept router advertisements ☐

Send router solicitations ☒

IPv6 address

IPv6 gateway

DHCP Server

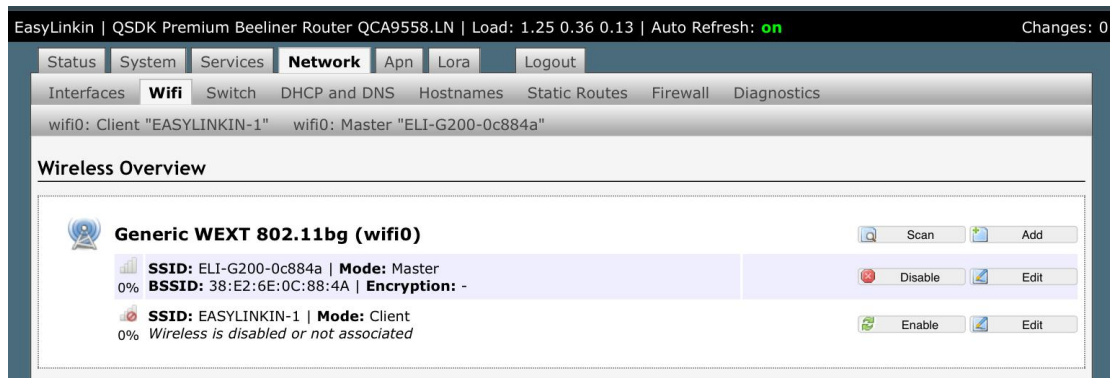
General Setup

Ignore interface ☒ Disable DHCP for this interface.

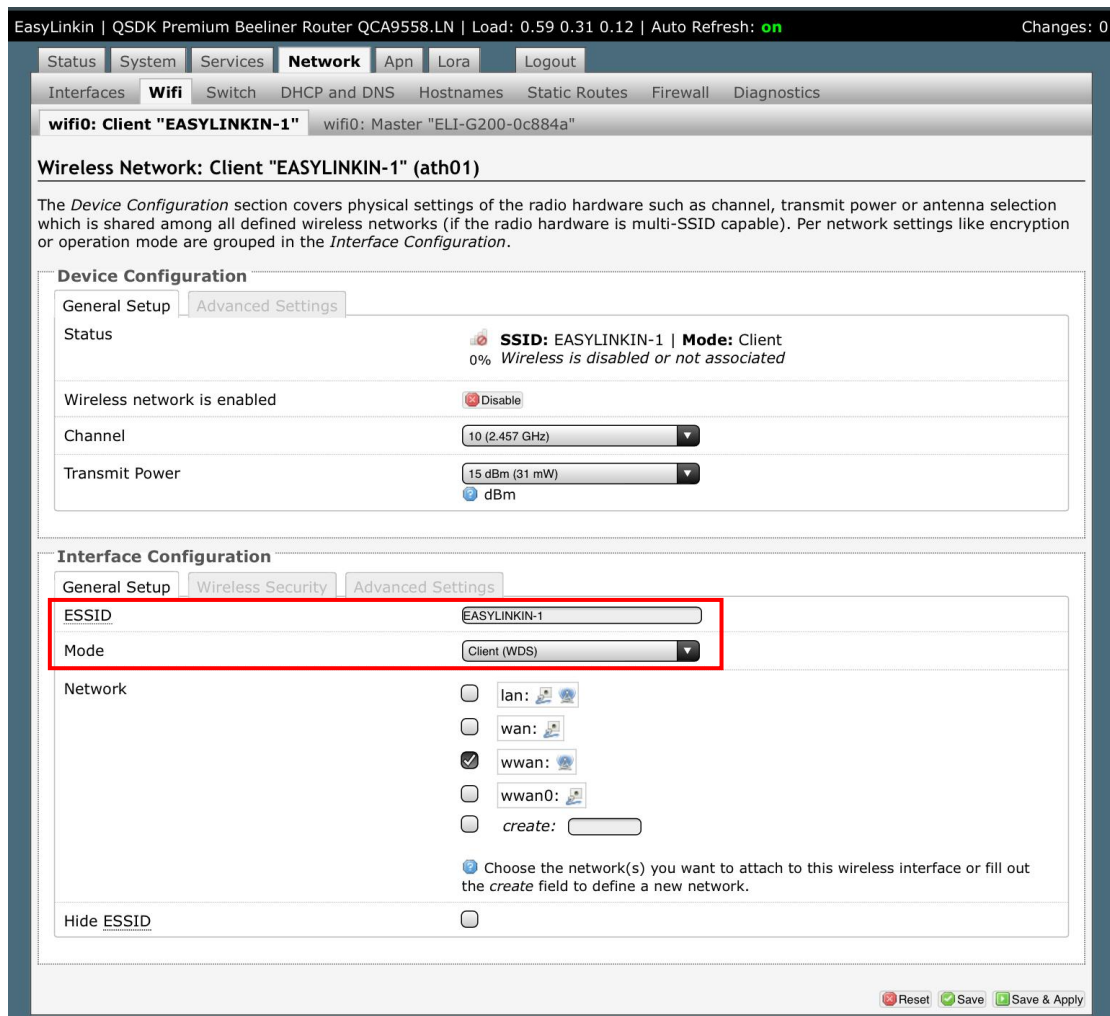
Reset Save Save & Apply

Step 5: Click Save and Apply button to make the changes take effect.

Step 6: Click **Network- WiFi** to enter the WiFi configuration page, there are two methods to configure WiFi.



- ① Click Edit in the Client mode, set the ESSID of the AP to be connected, and choose Client (WDS) mode.



- ② Click the Scan button, and a list of available WiFi networks will appear. After selecting one to join, click the submit button to enter the WiFi configuration interface, and select Client (WDS) in the Mode drop-down box.


EasyLinkin | QSDK Premium Beeliner Router QCA9558.LN | Load: 1.25 0.36 0.13 | Auto Refresh: **on** Changes: 0



Status System Services **Network** Apn Lora Logout


Interfaces **Wifi** Switch DHCP and DNS Hostnames Static Routes Firewall Diagnostics



wifi0: Client "EASYLINKIN-1" wifi0: Master "ELI-G200-0c884a"


Wireless Overview




Generic WEXT 802.11bg (wifi0)

 Scan
  Add

 **SSID:** ELI-G200-0c884a | **Mode:** Master
0% **BSSID:** 38:E2:6E:0C:88:4A | **Encryption:** -

 Disable
  Edit

 **SSID:** EASYLINKIN-1 | **Mode:** Client
0% *Wireless is disabled or not associated*





























 Enable
  Edit

EasyLinkin | QSDK Premium Beeliner Router QCA9558.LN | Load: 0.46 0.30 0.12 Changes: 0

Status System Services **Network** Apn Lora Logout

Interfaces Wifi **Switch** DHCP and DNS Hostnames Static Routes Firewall Diagnostics

Join Network: Wireless Scan

	JCSS-QT Channel: 11 Mode: Master BSSID: 88:25:93:03:21:18 Encryption: mixed WPA/WPA2 - PSK	
	ELI-G200-64cd2d Channel: 11 Mode: Master BSSID: B0:41:1D:64:CD:2D Encryption: WPA2 - PSK	
	EASYLINKIN-2 Channel: 10 Mode: Master BSSID: B0:41:1D:E0:3F:8D Encryption: WPA2 - PSK	
	HUAWEI-B315-0B59 Channel: 9 Mode: Master BSSID: 30:45:96:30:0B:59 Encryption: WPA2 - PSK	
	EASYLINKIN-1 Channel: 10 Mode: Master BSSID: C8:3A:35:EC:EF:70 Encryption: mixed WPA/WPA2 - PSK	
	hidden Channel: 10 Mode: Master BSSID: 0A:69:6C:5D:1D:4C Encryption: mixed WPA/WPA2 - PSK	
	DM-1605061440 Channel: 6 Mode: Master BSSID: 5E:CF:7F:02:72:61 Encryption: mixed WPA/WPA2 - PSK	
	ovuwork Channel: 10 Mode: Master BSSID: 06:69:6C:5D:1D:4C Encryption: mixed WPA/WPA2 - PSK	
	szeasylinkin Channel: 7 Mode: Master BSSID: 78:44:FD:F1:BF:43 Encryption: mixed WPA/WPA2 - PSK	
	ovuwork Channel: 1 Mode: Master BSSID: 06:69:6C:5D:1D:2C Encryption: mixed WPA/WPA2 - PSK	
	hidden Channel: 1 Mode: Master BSSID: 0A:69:6C:5D:1D:2C Encryption: mixed WPA/WPA2 - PSK	
	g280shengchanceshi Channel: 1 Mode: Master BSSID: B0:95:8E:D5:36:2B Encryption: mixed WPA/WPA2 - PSK	
	ovuwork Channel: 1 Mode: Master BSSID: 06:69:6C:5D:1D:54 Encryption: mixed WPA/WPA2 - PSK	
	hidden Channel: 1 Mode: Master BSSID: 0A:69:6C:5D:1D:54 Encryption: mixed WPA/WPA2 - PSK	

EasyLinkin | QSDK Premium Beeline Router QCA9558.LN | Load: 0.40 0.33 0.15 Changes: 0

Status System Services **Network** Apn Lora Logout

Interfaces Wifi Switch DHCP and DNS Hostnames Static Routes Firewall Diagnostics

Join Network: Settings

Replace wireless configuration The hardware is not multi-SSID capable and existing configuration will be replaced if you proceed.

WPA passphrase Specify the secret encryption key here.

Name of the new network The allowed characters are: A-Z, a-z, 0-9 and _

Create / Assign firewall-zone

☐ lan: lan:

☒ wan: wan: wwan:

☐ unspecified -or- create:

Choose the firewall zone you want to assign to this interface. Select unspecified to remove the interface from the associated zone or fill out the create field to define a new zone and attach the interface to it.

[Back to scan results](#) [Submit](#)

EasyLinkin | QSDK Premium Beeline Router QCA9558.LN | Load: 0.42 0.34 0.15 | Auto Refresh: on Unsaved Changes: 10

Status System Services **Network** Apn Lora Logout

Interfaces **Wifi** Switch DHCP and DNS Hostnames Static Routes Firewall Diagnostics

wifi0: Client "ovuwork" wifi0: Master "ELI-G200-0c884a"

Wireless Network: Client "ovuwork" (ath01)

The Device Configuration section covers physical settings of the radio hardware such as channel, transmit power or antenna selection which is shared among all defined wireless networks (if the radio hardware is multi-SSID capable). Per network settings like encryption or operation mode are grouped in the Interface Configuration.

Device Configuration

General Setup **Advanced Settings**

Status **SSID: ovuwork | Mode: Client**
0% Wireless is disabled or not associated

Wireless network is enabled Disable

Channel

Transmit Power dBm

Interface Configuration

General Setup **Wireless Security** Advanced Settings

ESSID

Mode ☒ Client (WDS)

Network

☐ lan:

☐ wan:

☒ wwan:

☐ wwan0:

☐ create:

Choose the network(s) you want to attach to this wireless interface or fill out the create field to define a new network.

Hide ESSID ☐

[Reset](#) [Save](#) [Save & Apply](#)

Step 7: Click Wireless Security, enter key, then click Save & Apply waiting for connecting.

EasyLinkin | QSDK Premium Beeliner Router QCA9558.LN | Load: 0.03 0.05 0.05 | Auto Refresh: **on** **Unsaved Changes: 9**

Status System Services **Network** apn Lora Logout

Interfaces **Wifi** Switch DHCP and DNS Hostnames Static Routes Firewall Diagnostics

wifi0: Client "EASYLINKIN-1" wifi0: Master "ELI-G200-0c884a"

Wireless Network: Client "EASYLINKIN-1" (ath01)

The *Device Configuration* section covers physical settings of the radio hardware such as channel, transmit power or antenna selection which is shared among all defined wireless networks (if the radio hardware is multi-SSID capable). Per network settings like encryption or operation mode are grouped in the *Interface Configuration*.

Device Configuration
 General Setup **Advanced Settings**
 Status
 95%
Mode: Client | **SSID:** EASYLINKIN-1
BSSID: 6C:E8:73:B1:15:4C | **Encryption:** -
Channel: 1 (2.412 GHz) | **Tx-Power:** 15 dBm
Signal: -58 dBm | **Noise:** -95 dBm
Bitrate: 54.0 Mbit/s | **Country:** 00

Wireless network is enabled ☒ Disable
 Channel
 Transmit Power
☒ dBm

Interface Configuration
 General Setup **Wireless Security** Advanced Settings
 Encryption
 Cipher
 Key

Step 8: If WiFi configuration is done, the AP connected can be displayed in Wireless Overview in WiFi page.

EasyLinkin | QSDK Premium Beeliner Router QCA9558.LN | Load: 1.28 0.61 0.27 | Auto Refresh: **on** **Changes: 0**

Status System Services **Network** Apn Lora Logout

Interfaces **Wifi** Switch DHCP and DNS Hostnames Static Routes Firewall Diagnostics

wifi0: Client "ovuwork" wifi0: Master "ELI-G200-0c884a"

Wireless Overview

Generic WEXT 802.11bg (wifi0)
Channel: 1 (2.412 GHz) | **Bitrate:** 54 Mbit/s

0%
SSID: ELI-G200-0c884a | **Mode:** Master
BSSID: 38:E2:6E:0C:88:4A | **Encryption:** -

100%
SSID: ovuwork | **Mode:** Client
BSSID: 06:69:6C:5D:1D:54 | **Encryption:** -

Associated Stations

SSID	MAC-Address	IPv4-Address	Signal	Noise	RX Rate	TX Rate
No information available						

Note:

The Master mode is only used by technicians, so please do not do any modification under this mode.

4.3 Modifying LoRa Parameters

Please follow below steps to modify LoRa parameters:

Step1: Click **LoRa** in the tab and enter LoRa configuration page, which is composed of three parts: Version, Base Configuration, Radio And NS Server Configuration.

EasyLinkin | QSDK Premium Beeline Router QCA9558.LN | Load: 1.09 0.59 0.27 Changes: 0

Status System Services Network Apn **Lora** Logout

Config

LoRa Configuration

Version

Ota Version:	2.0.0
Lora Version:	v2.1.5.2110182044
System Version:	Linux version 3.3.8 (cecport@ubuntu) (gcc version 4.6.3 20120201 (prerelease) (Linaro GCC 4.6-2012.02)) #1 Fri Nov 29 01:01:45 PST 2019

Base Configuration

Gateway EUI:	38e26effe0c884a
Net_Status:	connected
NS_Status:	connected

Radio And NS Configuration

NS_Communication_Protocol:	UDP
Select Confile:	US915
NS Server Addr[default gwbr.easylinkin-ns.com]:	gwbr.easylinkin-ns.com
NS Server Port Up:	1700
NS Server Port Down:	1700
NM Server Addr:	api.easylinkin.com
NM Server Port:	80

Reset Save Save & Apply

Step 2: Gateway EUI, network connection and NS connection status can be shown in Base Configuration.

Step 3: In Radio And NS Configuration,UDP and MQTT communication modes are supported and different LoRa frequency band can be chosen.

In UDP mode, you can select the actual Lora band from the drop-down menu, and configure the NS Server addr (default: gwbr.easylinkin-ns.com), NS Server Port up(default:1700), NS Server Port down(default:1700, NM Server Addr(default: api.easylinkin.com) , and NM Server Port (default:80)

Radio And NS Configuration

NS_Communication_Protocol:	UDP
Select Confile:	US915
NS Server Addr[default gwbr.easylinkin-ns.com]:	gwbr.easylinkin-ns.com
NS Server Port Up:	1700
NS Server Port Down:	1700
NM Server Addr:	api.easylinkin.com
NM Server Port:	80

Reset Save Save & Apply

In MQTT mode, you can configure the information of the MQTT proxy server. MQTT protbuf_coding_method is true for protobuf encoding and false for JSON encoding.

EasyLinkin | QSDK Premium Beeline Router QCA9558.LN | Load: 1.09 0.59 0.27
Changes: 0

Status
System
Services
Network
Apn
Lora
Logout

Config

LoRa Configuration

Version

Ota Version:	2.0.0
Lora Version:	v2.1.5.2110182044
System Version:	Linux version 3.3.8 (cecport@ubuntu) (gcc version 4.6.3 20120201 (prerelease) (Linaro GCC 4.6-2012.02)) #1 Fri Nov 29 01:01:45 PST 2019

Base Configuration

Gateway EUI:	38e26efffe0c884a
Net_Status:	connected
NS_Status:	connected

Radio And NS Configuration

NS_Communication_Protocol:	MQTT
mqtt port	8883
mqtt user name	lorun
mqtt password	Lorun@123
mqtt host	mqtt.lora.miota.id
mqtt clean_session	0
mqtt request_timeout_ms	2000
mqtt keepalive_interval_ms	60000
mqtt protobuf_coding_method	true
Select Confile:	US915
NM Server Addr:	api.easylinkin.com
NM Server Port:	80

Reset
Save
Save & Apply

After configuration, click the Save & Apply button in the bottom right of the page.

Note:

Only UDP mode can configure ns server addr, and mqtt does not have this configuration item;

4.4 LoRa Customized Configuration

Step 1: Click **Select Confile**, select **CUSTOMIZE**, following information pop up .

UDP mode:

EasyLinkin | QSDK Premium Beeliner Router QCA9558.LN | Load: 1.09 0.59 0.27 Changes: 0

Status System Services Network Apn **Lora** Logout

Config

LoRa Configuration

Version

Ota Version:	2.0.0
Lora Version:	v2.1.5.2110182044
System Version:	Linux version 3.3.8 (cecport@ubuntu) (gcc version 4.6.3 20120201 (prerelease) (Linaro GCC 4.6-2012.02)) #1 Fri Nov 29 01:01:45 PST 2019

Base Configuration

Gateway EUI:	38e26effe0c884a
Net_Status:	connected
NS_Status:	connected

Radio And NS Configuration

NS_Communication_Protocol:	UDP
Select Confile:	CUSTOMIZE
NS Server Addr[default gwbr.easylinkin-ns.com]:	gwbr.easylinkin-ns.com
NS Server Port Up:	1700
NS Server Port Down:	1700
NM Server Addr:	api.easylinkin.com
NM Server Port:	80
Radio0 Center Frequency(HZ):	472600000
Channel 0 Offset(HZ):	-300000
Channel 1 Offset(HZ):	-100000
Channel 2 Offset(HZ):	100000
Channel 3 Offset(HZ):	300000
Radio1 Center Frequency(HZ):	473400000
Channel 4 Offset(HZ):	-300000
Channel 5 Offset(HZ):	-100000
Channel 6 Offset(HZ):	100000
Channel 7 Offset(HZ):	300000
Channel 8 std Offset(HZ):	-200000
Channel 8 std Bandwidth(HZ):	250000
Channel 8 std Spread_factor:	7
Channel 9 fsk Offset(HZ):	300000
Keepalive Interval(S):	15
Stat Interval(S):	300

Reset Save Save & Apply

MQTT mode:

EasyLinkin | QSDK Premium Beeline Router QCA9558.LN | Load: 1.09 0.59 0.27 Changes: 0

StatusSystemServicesNetworkApnLoraLogout

Config

LoRa Configuration

Version

Ota Version:	2.0.0
Lora Version:	v2.1.5.2110182044
System Version:	Linux version 3.3.8 (cecport@ubuntu) (gcc version 4.6.3 20120201 (prerelease) (Linaro GCC 4.6-2012.02)) #1 Fri Nov 29 01:01:45 PST 2019

Base Configuration

Gateway EUI:	38e26efffe0c884a
Net_Status:	connected
NS_Status:	connected

Radio And NS Configuration

NS_Communication_Protocol:	MQTT
mqtt port	8883
mqtt user name	lorun
mqtt password	Lorun@123
mqtt host	mqtt.lora.miota.id
mqtt clean_session	0
mqtt request_timeout_ms	2000
mqtt keepalive_interval_ms	60000
mqtt protobuf_coding_method	true
Select Confile:	CUSTOMIZE
NM Server Addr:	api.easylinkin.com
NM Server Port:	80
Radio0 Center Frequency(HZ):	472600000
Channel 0 Offset(HZ):	-300000
Channel 1 Offset(HZ):	-100000
Channel 2 Offset(HZ):	100000
Channel 3 Offset(HZ):	300000
Radio1 Center Frequency(HZ):	473400000
Channel 4 Offset(HZ):	-300000
Channel 5 Offset(HZ):	-100000
Channel 6 Offset(HZ):	100000
Channel 7 Offset(HZ):	300000
Channel 8 std Offset(HZ):	-200000
Channel 8 std Bandwidth(HZ):	250000
Channel 8 std Spread_factor:	7
Channel 9 fsk Offset(HZ):	300000
Keepalive Interval(S):	15
Stat Interval(S):	300

ResetSaveSave & Apply

Step 2: Users can customize frequency, heartbeat packet period and status packet period of the NS server according to actual needs.

Step 3: After configuration, click Save & Apply button.

4.5 Setting APN Parameters

Click **Apn** in the tab and set Apn name, User name and Password of the SIM card in below window.

EasyLinkin | QSDK Premium Beeline Router QCA9558.LN | Load: 0.04 0.31 0.23 | Changes: 0

Status System Services Network **Apn** Lora Logout

Config

Apn Configuration

ApnChannel:

ApnName:

UserName:

PassWord:

Reset Save Save & Apply

4.6 Timezone Configuration

Step 1: Click **System**->**System** and enter System configuration page.

Step 2: Select corresponding time zone as needed.

EasyLinkin | QSDK Premium Beeline Router QCA9558.LN | Load: 0.03 0.31 0.23 | Auto Refresh: on | Changes: 0

Status **System** Services Network Apn Lora Logout

System Administration Software Startup Scheduled Tasks LED Configuration Backup / Flash Firmware Reboot

System

Here you can configure the basic aspects of your device like its hostname or the timezone.

System Properties

General Settings **Logging** Language and Style

Local Time: Tue Oct 19 17:15:05 2021

Hostname:

Timezone:

Time Synchronization

Enable NTP client: ☒

Provide NTP server: ☐

NTP server candidates:

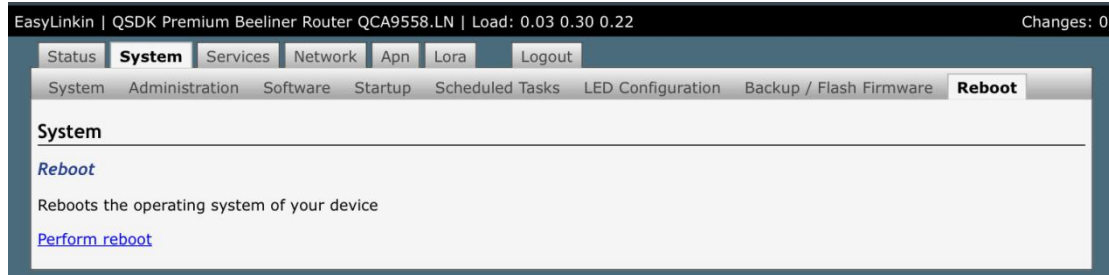
-
-
-
-
-

Reset Save Save & Apply

Step 3: After configuration, click Save & Apply button.

4.7 Rebooting Gateway

After all configurations/modifications are completed, select **System**->**Reboot**, and click the Perform reboot button to restart the gateway. All configurations/modifications will take effect after the gateway restarts.



5. INSTALLATION

There are three installation methods of G200 gateway:

- Desktop: Put the gateway on a table and then adjust antenna direction accordingly, which is suitable for temporary demonstration and debugging.
- Wall mounting: Install the gateway on the wall through expansion pipes and screws and then adjust antenna direction accordingly.
- Ceiling mounting: Fix the gateway on the ceiling with expansion pipes and screws and then adjust antenna direction accordingly.

5.1 Wall Mounting

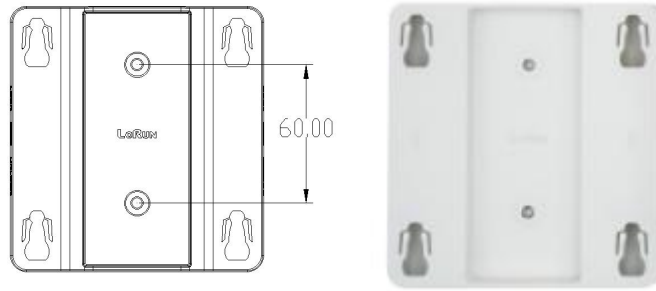


Install gateway bracket:

Step 1: Select installation position on wall and mark the locations of the screw holes.

Step 2: Drill holes (Φ5) in the wall and plug in plastic extension pipes (PA4.0*30mm), then place the gateway bracket onto the marked location with holes aligned.

Step 3: Tighten the screws.



Place gateway into bracket:

Step 1: Connect WiFi/LoRa antennas.

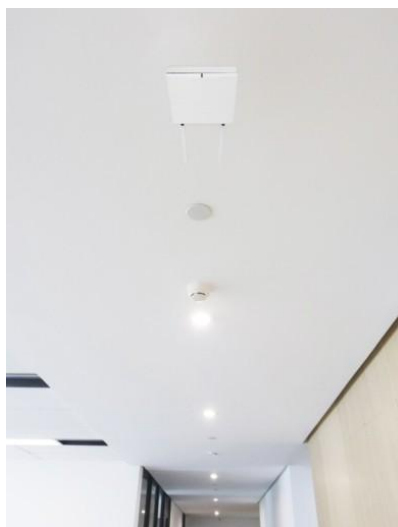
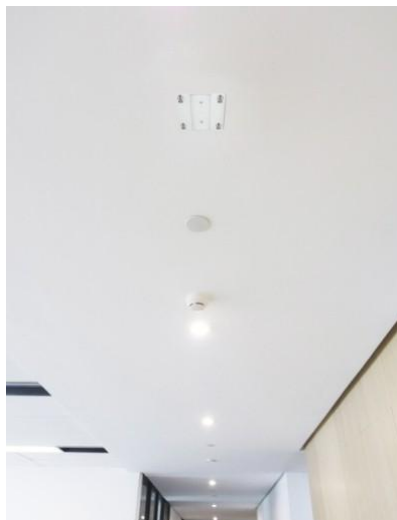
Step 2: Connect power adapter, connect Ethernet cable or insert SIM card. When the gateway is power on, check the LED status. Make sure the gateway is working normally.

Step 3: Place gateway hook in the to the bracket grooves, push the gateway upward (in a direction shown with a blue arrow) and lock it to the racket.



5.2 Ceiling Mounting



Ceiling mounting is almost the same as wall mounting except that the bracket needs to be installed under the ceiling.







Note:

- The gateway should be installed gently without violent collisions or drops.
- The gateway should be installed on a flat wall with little dust ,dry and ventilated. Do not expose the gateway to rain, water seepage and heavy humidity.

6. PACKAGE LIST

No.	Photo	Name	Quantity(PCS)	Note
1		G200 Gateway	1	
2		Power Adapter	1	FCC/UL/CE/CCC
3		LoRa Antenna	1	

4		WiFi Antenna	1	
5		Bracket	1	
6		Product Specification	1	
7		Certificate & Warranty Card	1	

7. FCC STATEMENT

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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 important announcement .

8. SUPPORT

If you have any question or problem with our gateway, please contact us for support.

EasyLinkin

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