F8L10GW LoRaWAN	Document Version	Pages
Base Station User	V2.0.1	
Manual	Model: F8L10GW	Total: 31

F8L10GW LoRaWAN Base Station User Manual

Model	Category
F8L10GW-433	EU433
F8L10GW-470	CN470
F8L10GW-868	EU868
F8L10GW-915	US915



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Chapter 1 Product Introduction

1.1 Overview

F8L10GW is a wireless communication base station based on LoRaWAN protocol. It connects to LoRaWAN terminals of various applications and transmits terminal data to the cloud through 3G/4G or wired Ethernet. Support wireless configuration management and online upgrade, GPS positioning, mains power supply, optional POE power supply, optional DC power supply, etc.

F8L10GW is complied with standard LoRaWAN protocol, it's compatible with LoRaWAN devices and NS. The product has been widely used in M2M industry, smart grid, smart transportation, industrial automation, intelligent buildings, fire control, public security, environmental protection, meteorology, digital medical treatment, telemetry, military, space exploration, agriculture, forestry, water, mining, petrochemical and other fields.



Figure 1-1 Topology Diagram

1.2 Features & Benefits

Industrial-grade Design

- High performance industrial-grade wireless communication module
- High performance industrial-grade multi-channel LoRaWAN RF chip
- Aluminum housing, IP65 metal casting



Stability & Reliability

- WDT design
- Complete anti-drop mechanism ensures device always online
- Ethernet interface with built-in 1.5KV electromagnetic isolation protection
- SIM/UIM card interface with built-in 15KV ESD protection
- Built-in reverse phase protection, over voltage protection and lightning protection
- Antenna lightning protection

1.3 Hardware Block Diagram



Figure 1-2 Hardware Block Diagram

1.4 Specifications

CHARACTERISTICS			
Network Structure	Simple Star Network Topology and support repeater function		
LoRaWAN Protocol	Class A, Class B*, Class C		
Band	EU433, CN470-510, CN779-787, EU863-870, US902-928, AU915-928, AS923, KR920-923		
Outdoor	6 Km		
Out Power	23±2dBm		
Sensitivity	-140dbm@LoRa; -70dbm @WIFI		
Bandwidth	125kHz \ 250kHz \ 500kHz		
Upstream Channel	8		
Downstream Channel	1		
Communication Rate	ADR		
Work Mode	Support receive and send at same frequency or different frequency		
Location Service	GPS or Beidou		



Server Report Method	3G/4G/Wired Ethernet
Local Storage	32G TF Card
ANTENNA	
LoRa	N-type female antenna, omnidirectional fiberglass antenna, 2dBi
4G Cellular	N-type female antenna, omnidirectional fiberglass antenna, 3dBi
WIFI	N-type female antenna, 2.4G omnidirectional fiberglass antenna, 3dBi
GPS	N-type female antenna, omnidirectional fiberglass antenna, 4dBi
POWER SUPPLY	
Default	Standard AC 220V
Optional-1 (DC)	9~36V
Optional-2 (POE)	10/100 Base-T, IEEE802.3af/IEEE802.3at standard
POWER CONSUMPTION	
Stand By	Average Current≤140mA@12V
Communication	TXD≤ 550mA@12V
	RXD≤ 420mA@12V
PHYSICAL PROPERTIES	
Dimensions	289.4x217.5x115.0 mm (excluding antennas and mountings)
Weight	2700g (excluding antennas, accessories and POE power)
Installation	Wall mount or pole mount (accessories provide)
OTHERS	
Operating Temperature	-40~+85°C (-40~+185°F)
Storage Temperature	-40~+125°C (-40~+257°F)
Relative Humidity	95% (non-condensing)
Certifications	CE & FCC



Chapter 2 Installation

2.1 General Packing List

F8L10GW must be installed correctly and the installation must be conducted by a qualified engineer recognized by Four-Faith.

> Warning:

1. Power off before installation

2. Don't remove the cover, power interface and antenna interface

Before you install the F8L10GW, please check the package contents and make sure it completely.

Item			Remark
F8L10GW			
Y-type	wrench	1	
4G fiberglass omn	idirectional antenna	1	
WIFI fiberglass om	nidirectional antenna	1	
GPS fiberglass om	nidirectional antenna	1	
LoRa fiberglass om	nidirectional antenna	1	
\A/-11	Bracket	1	
vvali mount	Swelling screw ø14mm	3	Select one installation
Pole mount	Fixed Bracket	2	
Powe	er line	1	optional
POE		1	optional
User manual CD		1	optional
QC passed card		1	
Warrar	nty card	1	

Form 2-1 F8L10GW packing list



2.2 Product Overview



2.3 SIM/UIM Card Installation

1. Unscrew the M6 screw on F8L10GW, and then open it.





2. Put the SIM/UIM card into the card slot.



3. If you want to take out the SIM/UIM card, you can push it, and then it will popup automatically.



4. Close the shell, and then tighten the M6 screws.



2.4 Wall-mounted Installation

- 1. Drill 3 holes of ø14mm diameter, 60 mm depth according to the position of the bracket.
- Requirement:
 - 1. the wall should be flat;
 - 2. must be in an open area
 - 3. make sure no shield within 5 meters
- 2. Fixing the swell screws in the bracket.



3. Fix the bracket on the wall and tighten the screw.



5. Tighten the four screws and fix the base station on the bracket, then install the antenna.





2.5 Pole-mounted Installation

- 1. Select the suitable pole with ø70~90mm diameter.
- Requirement:
 - 1. must be in an open area
 - 2. make sure no shield within 5 meters



2. Put the clamp into the pole, fix the clamp in the pole with screws.





2.6 Antenna Installation

After F8L10GW is installed on the wall or pole, then install all fiberglass omnidirectional antennas (4G/WIFI/LoRa), make sure all antennas are tightened to get best signal.



2.7 LED Indicators

The F8L10GW provides the following led indicators: including PWR, Sys, Online, SIM, LoRa, WAN, WIFI, Signal Strength. LED indicators description are as below:

LED	Indication	Status	Description
	Dewer Statue	Red light on	Power on
PWK	Power Status	Red light off	Power off
eve	Svetem Status	Yellow light flash	System work properly
515	System Status	Yellow light off	System work improperly
		Blue light on	WIFI on
VVIEI	WIFI Status	Blue light off	WIFI off
		Green light on	LoRa connect normal
LORA	LoRa Status	Green light off	LoRa connect abnormal
		Green light flash	LoRa data communicating
		Turn on one light	Weak (less than -90db)
3G/4G Signal Strength	Signal 1/2/3	Turn on two lights	Medium (-70db~-90db)
ouongui		Turn on three lights	Good (greater than -70db)
Online	Opline Status	Green light on	Online
Uniine	Unime Status	Green light off	Offline



Chapter 3 Configuration

This chapter explains how to access to Web GUI of F8L10GW to complete device configuration.

3.1 Connect with the F8L10GW

Before configuration, you can connect the base station with a PC by WIFI or network cable.



Connect the base station by WIFI (based on WIN10 operator system);



 Connect the open hotspot "Four-Faith", and then click the "Connect" button to connect it.



• Connect the base station by **network cable** (based on WIN10 operator system)

e Documents Anal Web Mor	a • Paul	tes	Adjust your computer's setting	15 View by:	Category *
			Contract Strength		
no Panel	(*)		System and security Review your computer's date	tes unth File History	
	Control Panel		Backup and Restore (Window	Appearance and Personalizativ	on
ontrol Panel	- PENTE AP		Network and Internet	Clark and Pasing	
	C Open Come file location		Ind Sound	Clock and Region Change date, time, or number formats	
contributi. 2	da Pier to Start		Network and Int	ernet	
uh S			Programs	Optimize visual display	
adsints)			Uninstall a program		
4d >					
on >		En	0.		
			.		
lick the "Search ben it	Box" to search "Conti	rol Panel", and then	Find the "Network and network status and ta	1 Internet" item, and then click the "Vi sks"	iew
Vielwork and Duaing Center					
← ··· ↑ 🗄 + Control Par	el + Network and Internet + Network and Sharing Cer	ing Foot on expections		📮 Ethernet Status	×
Control Panal Homa	view your basic network information and Viewyour active hetworks.	r service connections		General	
Change advanced sharing settings	OSTSD Public retwork	Access type: Internet Connections: all W/P (05150)		Connection	- 1
Media streaming options				IPv4 Connectivity: Internel IPv6 Connectivity: No network acces	
	請升優身的设备以显示出能Wiri全名 Private network	Access type internet Connections: U Etheorem		Media State: Enabler	đ
	Change your networking settings			Duration: 00:44:4: Speed: 100.0 Mbp:	5
	Set up a treadband, dad-up, or VPN conner	thernet Ethernet	1	Details	
	Displose and repair network problems, or p	et trubishooting information.			
			1	Activity	- 1
				Sent No Receiver	
				Bytes: 4,759,745 10,923,09	5
				Properties Oisable Diagnose	
Tren anton Andraend					_
Warnet Options Windows Defendet Firewall				Properties	не
Jump to	• this page, and click	the "Ethernet"	•	Click "Properties" to enter into IP c	onfigure
Ethernet Properties		× Internet Protocol Version 4 (TO	P/IPv4) Properties X	Internet Protocol Version 4 (TCP/IPv4) Properties	
Networking Sharing		General		General Alternate Configuration	
		You can get IP settings assign	ed automatically if your network supports	You can get IP settings assigned automatically if your netwo	ork supports
Connect using:	mily Controller	for the appropriate IP settings	192.168.1.12	this capability. Otherwise, you need to ask your network ad for the appropriate IP settings.	ministrator
Connect using:	Configure	Obtain an IP address aut	Iomatically 192,168,1.1	Obtain an IP address automatically	
Connect using:	arowing items:	Use the following IP addr	ess:	Use the following IP address:	_
Connect using:	t Networks	IP address:	192 . 168 . 1 . 12	IP address:	
Connect using:	It Networks A saring for Microsoft Networks	2 000 000	255 255 255 0	Subnet mask:	
Connect using: Reatek PCle FE Fa This connection uses the fi Second Second S	It Networks Automatic Auto	Subnet mask:	255.255.255.0	Li Default catemani	
Connect using: Reatek PCle FE Fa This connection uses the fi Connection uses the fi Connect for Microsoft Connect Field Connect Microsoft Network Microsoft Network	ft Networks A naring for Microsoft Networks eduler (Cersion 4 (CCP/IPv4)) : Adapter Multiplexor Protocol glocol Driver	Subnet mask: Default gateway:	192 . 168 . 1 . 1	Delaus gaceway.	
Connect using:	ft Networks Antiperson Networks solution of (CCP/IPv8) (Adapter Multiplexor Protocol (stocol Driver Corporation of CCP/IPv8) (CCP/IPv8) (CCP/IP	Subnet mask: Default gateway: Obtain DNS server addre	192 - 168 - 1 - 1	Obtain DNS server address automatically	
Connect using:	tt Networks arang for Microsoft Networks older Version 4 (TCP/IPv8) color Version 4 (TCP/IPv Col Version 4 (TCP/IPv	Obtain DNS server addre @ Use the following DNS se	192 .168 . 1 . 1 ss automatically rver addresses:	Obtain DNS server address automatically Use the following DNS server addresses:	_
Connect using:	th Networks samp for Microsoft Networks older <u>Version 4 (TCP/IPv6)</u> cAdgeter Multiplicer Protocol etcol Version 4 (TCP/IPv	(4) Preferred DNS server:	253 - 253 - 253 - 2 192 - 168 - 1 - 1 ss automatically rver addresses: 8 - 8 - 8 - 8	Obtain DNS server address automatically Ouse the following DNS server addresses: Preferred DNS server:	
Connect using:	It Networks average for Microsoft Networks obder (CD2/DH2) (Edgeor Microsoft Networks) (Edgeor Dhever Desense (CD1 Version 4 (TCP/IPv) (CD1 Version 4 (TCP/IPv) (CD1 Version 4 (TCP/IPv) (CD1 Version 4 (TCP/IPv)) (CD1 Version 4 (TCP/IPv)) (CD1 Version 4 (TCP/IPv))	(4) Alternate DNS server: Atternate DNS server: Atternate DNS server:	253 - 253 - 253 - 2 192 - 168 - 1 - 1 ss automatically rver addresses: 8 - 8 - 8 - 8 	Obtain DNS server address automationly Obtain DNS server addresses: Preferred DNS server: Akemake DNS server: Akemake DNS server:	
Connect using:	It Networks averag for Microsoft Networks okar (Marcond (CP2/(Pv2)) (Adapter Malphacer Protocol (Edocol Driver Coll Version 4 (TCP//Pv2) tocol/Internet Protocol. The default of that provide communication exted networks.	(4) Obtain DNS server addre @Use the following DNS server: Alternate DNS server: Alternate DNS server: Utaidate settings upon e	253 - 253 - 255 - 0 192 - 168 - 1 1 ss automatically rver addresses: 8 - 8 - 8 - 8 Mt Advanced	Obtain DNS server address automstolly Obtain DNS server addresses: Preferred DNS server: Aternate DNS server: Valdate settings upon exit	Advanced
Connect using:	It Networks haring for Microsoft Networks skiller (Version 4 (TCP/IPv)) (Kadert Malpheen Protocol (Intocol Driver Account of the Account of the Account Account of the Account of the Account of the Account Account of the Account of the Account of the Account Account of the Account	(4) Default gateway: Obtaut gateway: Obtaut DNS server addre @ Use the following DNS se Preferred DNS server: Alternate DNS server: Validate settings upon e	253 253 253 0 192 168 1 1 ss automatically rver addresses: 0 0 8 8 8 0 0 xt Advanced 0 0 0	Obtain DNS server address autombiothy Obtain DNS server addresses: Preferred DNS server: Akemake DNS server: Validate settings upon exit	Advanced



3.2 Access to configuration pages

Four-Faith LoRaWAN base station provides web configuration management. You can access to the configuration pages follow these steps:

- 1. Open browser (such as google, IE or others)
- 2. Input "**192.168.1.1**" in the search bar, and then it will enter into the configuration login page when connect F8L10GW correctly. If you are the first time configure the base station, please use the default settings by Four-Faith.

IP: 192.168.1.1

Username: admin Password: admin

Authentic	ation required		
http://192.1 Your conne	68.1.1 ction to this site is r	not private adm	in
Username			
Password			
	admin		
		Login	Cancel

3. Click the **"Log in"** button, and then you can access to device configuration management

Admin

Status



3.3 Web Configuration

There are 11 main pages in the web configuration tool, include Settings, Wireless, Service, VPN, Security, Access Restrictions, NAT, QoS Settings, Applications, Management and Status.

3.3.1 Setup

In this module, you can according system directions to change the basic settings of F8L10GW.

Warning: Click the "Save" button only save current settings, you need click the "Apply Settings" to make it effect. And if you don't want save changes, click the "Cancel Changes" will realize it.

3.3.1.1 Basic Setup

WAN Setup					
Setup Wireless S	rvices VPN Security Access	Restrictions	NAT	QoS	Арр
WAN Setup	Disabled Static IP Automatic Configuration DHCD				
WAN Connection Type	dhcp-4G PPPoE				
Connection Type	3G/UMTS/4G/LTE				

WAN Setup	Static IP Automatic Configuration - DHCP	Help more
VAN Connection Type Connection Type	dhcp-4G PPPoE 3G/UMTS/4G/LTE	Automatic Configuration - DHCP: This setting is most commonly used by Cable operators.
User Name Password Dial String	 □ ∪ *99***1# (UMTS/3G/3.5G) ∨	Inmask Enter the host name provided by your ISP.
APN PIN		Domain Name: Enter the domain name provided by your ISP.
Allow these authentication Keep Online Detection Detection Interval	✓ PAP ✓ CHAP ✓ MS-CHAP ✓ MS-CHAPv2 Ping ✓ 120 Sec.	Local IP Address: This is the address of the router.
Primary Detection Server IP Backup Detection Server IP	114 114 114 208 67 220 220	Subnet Mask: This is the subnet mask of the router.
Fixed WAN IP Fixed WAN GW Address	 Enable Enable Disable 	DHCP Server: Allows the router to manage your IP addresses.
Enable Dial Failure to Restart Force reconnect	Enable O Disable (Default: 10 minul Disable Enable Disable	tes) Start IP Address: The address you would like to start with.
Wan Nat STP	Enable Disable Enable Disable	Maximum DHCP Users: You may limit the number of addresses your router hands out. 0

There are 6 WAN connection types, include: Disable, Static IP, Automatic Configuration - DHCP, DHCP-4G, PPPOE and 3G/UMTS/4G/LTE. And F8L10GW provides wired ethernet (only support LAN port) and dhcp-4G(default) connection types.

Wired ethernet connection type

There have two configuration modes when you connect F8L10GW by network cable.

Mode 1: Static IP connection

Select the "Static IP" connection type, this page will auto refresh and then show the configuration parameters as follow:

Warning: you need prepare a public IP address.



WAN Connection Type —

Connection Type	Static II	P		1
WAN IP Address	10	. 139	. 31	. 121
Subnet <mark>Mask</mark>	255	. 255	. 255	252
Gateway	10	. 139	. 31	. 122
Static DNS 1	0	. 0	. 0	. 0
Static DNS 2	0	. 0	. 0	. 0
Static DNS 3	0	. 0	. 0	. 0

Parameters	Option	Description
WAN IP Address	-	Public IP address
Subnet Mask	-	Subnet mask parameter
Gateway	-	Gateway parameter
Static DNS1	-	Static domain name server 1
Static DNS2	-	Static domain name server 2
Static DNS3	-	Static domain name server 3

Mode 2: Automatic Configuration – DHCP connection

Select the **"Automatic Configuration - DHCP**" connection type, this page will auto refresh and then show the configuration parameters as follow:

Warning: device will dynamic assignment the IP address to WAN port in this mode.

WAN Setup	
AN Connection Type	
Connection Type	Automatic Configuration - DHCP 🗸
Wan Nat	Enable O Disable
STP	O Enable Disable

4 DHCP-4G connection type

Select the "**dhcp-4G**" connection type, this page will auto refresh and then show the configuration parameters as follow:

Warning: In this mode, the IP address of WAN port assigned by dhcp-4G (default).



WAN Connection Type

Connection Type	dhcp-4G \checkmark
Jser Name	
assword	Unmask
PN	3gnet
ixed WAN IP	O Enable 💿 Disable
llow these authentication	
Connection type	Auto 🗸
IN	Unmask
eep Online Detection	Ping 💙
etection Interval	120 Sec.
rimary Detection Server IP	114 . 114 . 114 . 114
Backup Detection Server IP	208 . 67 . 220 . 220
nable Dial Failure to Restart	Enable O Disable (Default: 10 minutes)
Van Nat	Enable O Disable
ТР	O Enable Disable

Parameters	Option	Description	
User Name	-	Sim card account assigned by operator	
Password	-	Sim card account assigned by operator	
APN	-	APN number assigned by operator	
Fixed WAN IP	Enable	Turn on fixed WAN IP address function. And then fill in the WAN IP address Fixed WAN IP WAN IP Address U Disable	
	Disable	I urn off this function	
Allow these	PAP	PAP authentication	
authentication	CHAP	CHAP authentication	
	Auto	Automatically select operator network according deployment position	
	Force-4G	Only works on 4G network	
	Force-3G	Only works on 3G network	
Connection type	Force-2G	Only works on 2G network	
	Prefer-3G	3G network prefer select	
	Prefer-2G	2G network prefer select	
	Only 3G/2G	Support 2G/3G network	
	Only 4G/3G/2G	Support 2G/3G/4G network	
PIN	-	Sim card pin number	
	None	Disable keep online detection function	
Keep Online Detection	Ping	Send ping packets to detect whether connection is normal. In this mode, the "Detection Interval", "Primary Detection Server IP" and "Backup Detection Server IP"	



		must be configured correctly
	Router	Use router method to detect whether connection is normal. In this mode, the "Detection Interval", "Primary Detection Server IP" and "Backup Detection Server IP" must be configured correctly
Detection Interval	-	Time interval between two detection, unit is second
Primary Detection Server IP	-	Response the primary detection server IP address of F8L10GW when detect data packets online. This configuration item takes effect when " Keep Online Detection " set " Ping " or " Router " mode
Backup Detection Server IP	-	Response the backup detection server IP address of F8L10GW when detect data packets online. This configuration item takes effect when " Keep Online Detection " set " Ping " or " Router " mode
Enable Dial Failure to	Enable	Turn on restart the device when dial-up failure function
Restart	Disable	Turn off restart the device when dial-up failure function
Wan Nat	Enable	Turn on NAT forwarding of WAN port function
vvali ivat	Disable	Turn off NAT forwarding of WAN port function
STP	Enable	Turn on STP protocol. STP (Spanning Tree Protocol) can be applied to the loop network Turn off STP protocol

3.3.2 Wireless

You can configure WIFI parameters here. WIFI mainly used to upgrade device firmware.



		If you wish to exclude Wireless-G
vsical Interface ra0 - SSID [Fou Wireless Mode Wireless Network Mode Wireless Network Name (SSID) Wireless Channel Channel Width	Important Former Important Important Important	 clients, choose <i>B-Dniy</i> mode. If you would like to disable wireless access, choose <i>Disable</i>. Note: when changing wireless mode some advanced parameters are succeptible to be modified ("Basic Rate" or "Frame Burst").
Wireless SSID Broadcast Network Configuration	 Enable Disable Unbridged Bridged 	

Parameters	Option	Description
Wireless	Enable	Turn on wifi
Network	Disable	Turn off wifi
	AP	Convert wired network into wireless signal
		Receive wireless signal from other wireless routers
	client	and then convert it into wired network. PC only
		connect it through network cable
Wireless	ad-boc	P2P connection, as virtual AP, and other PC can
Mode		directly connect and share the network through it
	relay	Relay is a transmission path between two
		switching centers
	relay bridge	Wireless transmission can bridge the
		communication between two or more networks
	Hybrid	Support 802.11b/g/n standard devices
	Bg-mix	Support 802.11b and 802.11g standard devices
Wireless	NG-mix	Support 802.11g and 802.11n standard devices
Network Mode	B Only	Only support 802.11b standard devices
	G Only	Only support 802.11g standard devices
	Only N	Only support 802.11n standard devices
Wireless		
Network	-	You can edit wireless network name here
Name (SSID)		
		There are 1-13 channels available. In the
Wireless	_	environment of multiple wireless devices, please
Channel		try to avoid using the same channels as other
		devices
Channel	-	20MHZ and 40MHZ are available



Width				
Wireless SSID	Enable	Broadcast SSID		
Broadcast	Disable	Hide SSID		
Bridged	Bridged	In general, select bridged. The bridge is connected to F8L10GW		
Network Configuration	Unbridged	when no bridge is connected to F8L10GW, and the IP address needs to be manually configured: Network Configuration Multicast forwarding Masquerade / NAT IP Address Subnet Mask		

Click the "Add" button in "Virtual Interfaces" bar to add virtual interface, as fellow:

Vireless Network Name (SSID)	ff_vap
ireless SSID Broadcast	Enable Disable
P Isolation	O Enable Disable
Vetwork Configuration	O Unbridged Bridged

3.3.3 LoRaWAN Application

You can configure lora parameters of base station here.

LoRaWAN	Enable Disable	
Enable Connect Failure to Restart	Enable Disable	
config type	CN470 🗸	
Server IP	120.42.46.98	
serv_port_up	1700	
serv_port_down	1700	
	0	
LoRaWAN	Enable O Disable	
LoRaWAN LoRaWAN Gateway ID	Enable Disable 54D0B4FFFE858F3C	
LoRaWAN LoRaWAN Gateway ID forward_crc_valid	Enable Disable S4D0B4FFFE858F3C Enable Disable	
LoRaWAN LoRaWAN Gateway ID forward_crc_valid forward_crc_error	 Enable Disable 54D0B4FFFE858F3C Enable Disable Enable Disable 	



LoRaWAN Gateway Basic Config

Parameters	Options	Description
	Enable	Turn on lora
LURAWAN	Disable	Turn off Iora
Enable Connect	Enable	
Failure to Restart	Disable	
Server IP	-	The IP address of LoRaWAN data service center
Serv_port_up	-	LoRaWAN data service center program uplink port. Value range is 0-65535 and the default value is 1700.
Serv_port_down	-	LoRaWAN data service center program downlink port. Value range is 0-65535 and the default value is 1700

LoRaWAN Gateway Advanced Config

Parameters	Options	Description
LoRaWAN	Enable	Turn on lora
	Disable	Turn off Iora
		the unique identity of the base station, which the
LoRaWAN Gateway ID	-	server can distinguish different LoRaWAN base
		station
Forward crc valid	Enable	Turn on CRC for validation (default)
	Disable	Turn off CRC for validation
	Enable	Turn on CRC for validation error function
Forward_crc_error	Forward_crc_error Disable Turn off CRC for validation error functi (default)	Turn off CRC for validation error function
		(default)
Forward are disabled	Enable	Turn on CRC validation
Forward_crc_disabled	Disable	Turn off CRC validation (default)

3.3.4 Admin

3.3.4.1 Management

This page allows network administrators to manage specific F8L10GW functions to ensure access and security.

Faith		F8L10GW User Ma
outer Management		
ter Password		
outer Username	••••••	
outer Password	••••••	

New password shall not exceed 32 characters length and shall not contain any space. Make sure the password is the same as the one you set, or the system will prompt an error.

We strongly recommend that modify the default password to ensure system security.

Web Access

You can manage the base station by HTTP or HTTPS protocol, and if you select to disable this function, it should be root manually.

Also, you can enable or disable the information pages of F8L10GW, so that you can protect it by password (input correctly username and password to open it).

Web Access		
Protocol	☐ НТТР ☐ НТТРS	
Auto-Refresh (in seconds)	3	
Enable Info Site	Enable O Disable	
Info Site Password Protection	Enabled	

Parameters	Options	Description
Brotocol	HTTP	Web access by http
Protocol	HTTPS We	Web access by https
Auto-Refresh (in		The time interval for automatic refresh the web
seconds)	-	page. If you set 0, it means turn off this function
	ble Info Site Enable Enable Enable display system information page before Disable Disable Disable display system information page before Disable Disable Disable display system information page before Disable Disable Disable Display system information page before Disable Disable Display system information page before Display System Display System information page before Display System Display System Dis	
Enable Info Site		login
		Disable display system information page before
	Disable	login
	Enabled	Enable the system information page password
Info Site Password	Linableu	protection function
Protection	Nono	Disable the system information page password
	NULLE	protection function

Remote Access

It allows remote manage the device through the internet.

Warning: If the remote access function is turn on, anyone who get the correctly IP address and password will change the device settings.



Remote Access		
Web GUI Management	Enable O Disable	
Use HTTPS		
Web GUI Port	8088	(Default: 8088, Range: 1 - 65535)
Local Web GUI Port	80	(Default: 80, Range: 1 - 65535)
SSH Management	Enable Disable	
SSH Remote Port	22	(Default: 22, Range: 1 - 65535)
Telnet Management	🔘 Enable 💿 Disable	

Parameters	Options	Description
Web GUI Management	Enable	Enable remote web management function. If you don't check the https protocol, you can input http://xxx.xxx.xxx.8088 to remote manage F8L10GW, else you need input https://xxx.xxx.xxx.8088 (x means the access IP address, and 8088 means the web access port),
	Disable	Disable remote web management function
Use HTTPS	-	Whether using https protocol access device. It will take effect when you check it
Web GUI Port	-	Specify the web access port, default 8088
Local Web GUI Port	-	Specify the local access port, default 80
SSH Management	Enable	Turn on SSH remote management function. You can get more information about SSH daemon settings in service pages
	Disable	Turn off SSH remote management function
SSH Remote Port	-	Specify the SSH remote port, default 22
Tolnot Management	Enable	Turn on telnet management function
ieniet managenient	Disable	Turn off telnet management function

Cron

Cron can execute the Linux commands what you plan. You can set the command lines or scripts in that.

Cron	Enable O Disable	
Additional Cron Jobs		

Parameters	Options	Description
Cron	Enable	Turn on Cron server
Cron	Disable	Turn off Cron server



Additional Cron Jobs

Linux command lines or scripts

• Remote Management

This function is used for server configurations with device platform, such as device monitoring platform, WIFI advertising system, device flow monitoring and so on. To get more details can contact with our technical support.

-

Firmware Upgrade

Remote firmware upgrade configuration.

Firmware Upgrade	Enable O Disable	
Upgrade Server IP	42.121.16.56	
Upgrade Server Port	882	(Default: 882, Range: 1 - 65535)

Parameters	Options	Description
Eirmwara Ungrada	Enable	Turn on remote firmware upgrade function
Firmware Opgrade	Disable	Turn off remote firmware upgrade function
Upgrade Server IP	-	Configure upgrade server IP address
Upgrade Server Port		Configure upgrade server port

3.3.4.2 Factory Defaults

No. Ver	
🔾 Yes 🖲 No	
Apply Settings Cancel Changes	
	O Yes No Apply Settings Cancel Changes

In this page, you can restore device configurations. If you select "**yes**" and then click the "**Apply Setting**" button, all configurations will be cleared and restored to factory settings.

3.3.4.3 Firmware Upgrade

Please select a file to upgrade	浏克
WARN	ING
Upgrading firmware ma Do not turn off the power o	y take a few minutes. or press the reset button!



New firmware version can be found in <u>en.four-faith.com</u>, you can download it free, and then loading it into F8L10GW. If the device can work normally, there is no need download and upgrade new firmware version, unless new firmware version includes what new features you want.

Click the **"browse"** button and then choose the firmware file and then click the **"upgrade"** button, the device starting upgrade. It may take a few minutes, please don't power off or reset the device.

Warning: It may be lost configurations when upgrade firmware, so you need backup current configurations before upgrade it.

3.3.4.4 Backup

This module is used to backup or restore the device configuration file.

ackup Settings Click the "Backup" button to download the configuration backup file to your computer.		
tore Settings		
lease select a file to restore	浏覽	
W A R N Only upload files backed up using this firmw Do not upload any files that were	I N G vare and from the same model of router. not created by this interface!	

If you want to backup configuration file, please click the **"Backup"** button and then follow the system directions step by step.

If you want to restore configuration file, please click the "**Browse**" button select the backup configuration file and then follow the system directions step by step. And click the "**Restore**" button to upload it.



3.3.5 Status

3.3.5.1 Router

	Wireless Mobi	le Router Firmware: F8I.10GW EU868 v1.0 (Nov 26 2018 14-149:58) std Time: 10:32:58 up 10 min, load average: 0.58, 0.65, 0.39 WAN P: 192.168.10.150
Four-Faith		3G/4G/4G+
Setup Wireless	Services VPN Security	Access Restrictions NAT QoS App Admin Status
Router Informatio		Help
System		Router Nan WAN
Router Name	Four-Faith	This is the sp LAN he
Router Model	Four-Faith Router	tab. Wireless
Firmware Version	F8L10GW EU868 v1.0 (1	Nov 26 2018 14:49:58) std - build 3437M MAC Addre
MAC Address	54:D0:B4:08:D7:23	This is the ro Sys-Info iss, as
Host Name	seen by your ISP.	
WAN Domain Name	Firmware Version:	
LAN Domain Name		This is the router's current firmware.
Current Time	Tue, 22 Jan 2019 10:32	158 Current Time:
Uptime	10 min	This is time received from the ntp server set on the Setup / Basic Setup
		tab.
Serial Applications	Disabled	Uptime: This is a measure of the time the router has been "up" and running.
Memory		
Total Available	125224 kB / 131072 kB	96% This is given as three numbers that
Free	99812 kB / 125224 kB	represent the system load during the last one, five, and fifteen minute
Used	25412 kB / 125224 kB	20%
Buffers	2612 kB / 25412 kB	10%
Cached	8892 kB / 25412 kB	35%
Active	4244 kB / 25412 kB	1796
		AT 79
Inactive	8672 kB / 25412 kB	34%
Inactive	8672 kB / 25412 kB	34%
Inactive	8672 kB / 25412 kB	34% Description
Inactive	5672 kB / 25412 kB	Jange Description Show the router name of base station
Inactive Item	Field Router Name Router Model	Jarge Jarge Description Show the router name of base station Show the router model name of base station
Inactive Item	Field Router Name Router Model Firmware version	Description Show the router name of base station Show the router model name of base station Show the current firmware version of base static
Inactive Item	Field Router Name Router Model Firmware version MAC Address	Jarge Description Show the router name of base station Show the router model name of base station Show the current firmware version of base station Show the MAC address of base station
Inactive Item	Field Router Name Router Model Firmware version MAC Address Host Name	Jarge Jarge Description Show the router name of base station Show the router model name of base station Show the current firmware version of base station Show the MAC address of base station Show the host name of base station
Inactive	Field Router Name Router Model Firmware version MAC Address Host Name WAN Domain	34% Description Show the router name of base station Show the router model name of base station Show the current firmware version of base station Show the MAC address of base station Show the host name of base station
Item	B672 kB / 25412 kB Field Router Name Router Model Firmware version MAC Address Host Name WAN Domain Name	Jave Description Show the router name of base station Show the router model name of base station Show the current firmware version of base station Show the MAC address of base station Show the host name of base station Show the WAN port domain name of base station
Item	B672 kB / 25412 kB Field Router Name Router Model Firmware version MAC Address Host Name WAN Domain Name	Jarge Jarge Description Show the router name of base station Show the router model name of base station Show the current firmware version of base station Show the MAC address of base station Show the host name of base station Show the WAN port domain name of base station
Item	Field Router Name Router Model Firmware version MAC Address Host Name WAN Domain Name LAN Domain	Java Java Description Show the router name of base station Show the router model name of base station Show the current firmware version of base station Show the MAC address of base station Show the host name of base station Show the WAN port domain name of base station Show the UAN port domain name of base station
Item	Field Router Name Router Model Firmware version MAC Address Host Name WAN Domain Name LAN Domain Name	Jave Description Show the router name of base station Show the router model name of base station Show the current firmware version of base station Show the MAC address of base station Show the host name of base station Show the WAN port domain name of base station Show the LAN port domain name of base station
Item	Field Router Name Router Model Firmware version MAC Address Host Name WAN Domain Name LAN Domain Name Current Time	Java Description Show the router name of base station Show the router model name of base station Show the current firmware version of base station Show the MAC address of base station Show the host name of base station Show the WAN port domain name of base station Show the LAN port domain name of base station Show the system current time of base station
Item	Field Router Name Router Model Firmware version MAC Address Host Name WAN Domain Name LAN Domain Name Current Time Uptime	Java Java Description Show the router name of base station Show the router model name of base station Show the current firmware version of base station Show the MAC address of base station Show the host name of base station Show the host name of base station Show the WAN port domain name of base station Show the LAN port domain name of base station Show the system current time of base station Show the system run time of base station
Item System	Field Router Name Router Model Firmware version MAC Address Host Name WAN Domain Name LAN Domain Name Current Time Uptime	Jarge Jarge Description Show the router name of base station Show the router model name of base station Show the current firmware version of base station Show the MAC address of base station Show the host name of base station Show the NAC address of base station Show the host name of base station Show the WAN port domain name of base station Show the LAN port domain name of base station Show the system current time of base station Show the system run time of base station
Inactive Item System Serial	B672 kB / 25412 kB Field Router Name Router Model Firmware version MAC Address Host Name WAN Domain Name LAN Domain Name Current Time Uptime Status	Java Description Show the router name of base station Show the router model name of base station Show the current firmware version of base station Show the MAC address of base station Show the host name of base station Show the NAC address of base station Show the host name of base station Show the WAN port domain name of base station Show the LAN port domain name of base station Show the system current time of base station Show the system run time of base station Show the serial application status of base station
Inactive Item System Serial Application	B672 kB / 25412 kB Field Router Name Router Model Firmware version MAC Address Host Name WAN Domain Name LAN Domain Name Current Time Uptime Status	34% Description Show the router name of base station Show the router model name of base station Show the current firmware version of base station Show the MAC address of base station Show the host name of base station Show the host name of base station Show the WAN port domain name of base station Show the LAN port domain name of base station Show the system current time of base station Show the system run time of base station Show the serial application status of base station
Inactive Item System Serial Application	Field Router Name Router Model Firmware version MAC Address Host Name WAN Domain Name LAN Domain Name Current Time Uptime Status	Jave Description Show the router name of base station Show the router model name of base station Show the current firmware version of base station Show the MAC address of base station Show the host name of base station Show the host name of base station Show the WAN port domain name of base station Show the LAN port domain name of base station Show the system current time of base station Show the system run time of base station Show the serial application status of base station Show the available memory size of base station
Inactive Item System Serial Application Memory	B672 kB / 25412 kB Field Router Name Router Model Firmware version MAC Address Host Name WAN Domain Name LAN Domain Name Current Time Uptime Status Total Available Free	Java Description Show the router name of base station Show the router model name of base station Show the current firmware version of base station Show the MAC address of base station Show the host name of base station Show the host name of base station Show the WAN port domain name of base station Show the LAN port domain name of base station Show the system current time of base station Show the system run time of base station Show the serial application status of base station Show the available memory size of base station



	Buffers	Show the available buffer of base station	
	Cached	Show the number of cache data	
	Active	Show the active memory size of base station	
	Inactive	Show the inactive memory size of base station	
Network	IP Filter Max	Show the IP Filter connections of base station	
	Connections		
	Active IP	Show the active IP connections of base station, if	
	Connections	you click this link, it will show all active IP details	

3.3.5.2 WAN

	Wireless Mobile Router		Time: 11:26:44 up 1:04, load average: 0.83, 0.6 WAN IP: 192.168.
Four-Faith	3G/4	4G/4G+	Language: English
Setup Wireless Services	VPN Security Access Restrictions N	AT QoS App	Admin Status
WAN			Help Router
Configuration Type			Configurati
Connection Type	Static		This shows t LAN quired
Connection Uptime	1:04:10		Internet. Thi Wireless entere
IP Address	192.168.10.150		Disconnect y Bandwidth are by
Subnet Mask	255.255.255.0		clicking on tr Sys-Info
Gateway	192.168.10.1		Total Traffic:
DNS 1	114.114.114.114		This shows your router's Internet traffic since last reboot.
DNS 2			- 10-1 - 11-
DNS 3			This shows your router's Internet
			traffic by month. Drag the mouse over graph to see daily data. Data is store
Traffic			in nyram.
otal Traffic			
Incoming (MBytes)	0		
Outgoing (MBytes)	0		
		60 MB 40 MB 20 MB	
January 20 Data Administration Eaclup Restors Delete	L9 (Incoming: 86 MB / Outgoing: 5 MB) Previous Month Next Month		



ltem	Parameters	Description
	Configuration Type	Show current connect type of base station
Configuration	Connection Uptime	Show current duration online of base station
	IP Address	Show the IP address of WAN port
	Subnet Mask	Show the subnet mask of WAN port
Туре	Gateway	Show the gateway of WAN port
	DNS1	Show the DNS1 of WAN port
	DNS2	Show the DNS2 of WAN port
	DNS3	Show the DNS3 of WAN port
Total Traffic	Incoming	Show the incoming total traffic
	Outgoing	Show the outgoing total traffic
Data Administration	Backup	Backup the data administration configuration
	Restore	Restore the data administration configuration
	Delete	Delete the data administration configuration

3.3.5.3 System Info

LoRaWAN		
Server status	connected	
Mac	54D0B4FFFE861886	
GPS status	vaild	
Longitude	118.047160	
Latitude	24.610998	
Altitude	91	

Item	Parameters	Description
Server status	-	Show the LoRaWAN server connection status
Мас	-	The device Mac address
GPS status	-	Show the GPS status
Longitude	-	Show current longitude of F8L10GW
Latitude	-	Show current latitude of F8L10GW
Altitude	-	Show current altitude of F8L10GW