

Dataprodukter utöver det vanliga

UG65 Quick Start Guide

 \square



Xiamen Milesight IoT Co., Ltd.

Safety Precautions

Milesight will not shoulder responsibility for any loss or damage resulting from not following the instructions of this operating guide.

- The device must not be modeled in any way.
- Do not place the device close to objects with naked flames.
- Do not place the device where the temperature is below/above the operating range.
- Do not power on the device or connect it to other electrical device when installing.
- Check lightning and water protection when used outdoors.
- Do not connect or power the equipment using cables that have been damaged.

Related Documents

This Quick Start Guide only explains the installation of Milesight UG65 LoRaWAN[®] Gateway. For more functionality and advanced settings, please refer to the relevant documents as below.

Document	Description	
UG65 Datasheet Datasheet for UG65 LoRaWAN® Gateway.		
UG65 User Guide	Users can refer to the guide for instruction on how to log in the web GUI, and how to configure all the settings.	

The related documents are available on Milesight website: https://www.milesight-iot.com

Declaration of Conformity

UG65 is in conformity with the essential requirements and other relevant provisions of the CE, FCC, and RoHS.





For assistance, please contact Milesight technical support: Email: iot.support@milesight.com Tel: 86-592-5085280 Fax: 86-592-5023065

Revision History

Date	Doc Version	Description
Aug. 31, 2020	V1.0	Initial version
Nov. 24, 2020	V2.0	Layout replace

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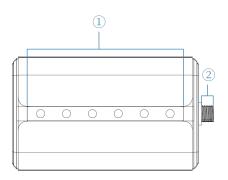
1. Packing List

Before you begin to install the UG65 gateway, please check the package contents to verify that you have received the items below.

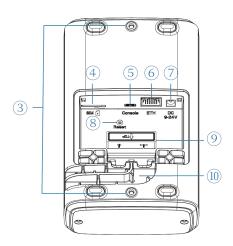
2. Hardware Introduction

2.1 Overview

A. Front Panel



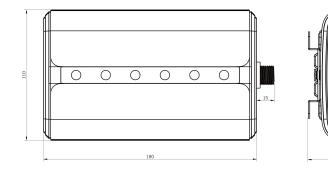
B. Rear Panel

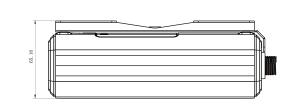


LED Area
 POWER: Power Indicator
 STATUS: System Indicator
 LoRa: LoRa Indicator
 Wi-Fi: Wi-Fi Indicator
 Wi-Fi: Cellular Indicator
 ETH: Ethernet Port Indicator
 LoRa Antenna Connector
 (only for external antenna version)

- ③ Bracket Mounting Screws
- ④ SIM Slot
- 5 Type-C Port
- 6 Ethernet Port (PoE)
- ⑦ Power Connector
- (8) Reset Button
- (9) Waterproof Silicone
- 10 Cable Groove

2.2 Dimensions (mm)





2.3 LED Indicators

LED	Indication	Status	Description
	Dower Statue	Off	The power is switched off
POWER Power Status		On	The power is switched on
STATUS	System Status	Blue Light	Static: the system is running properly
517105	System Status	Red Light	The system goes wrong
LoRa	LoRa Status	Off	Packet Forwarder mode is running off
LURA	LORA Status	Blue Light	Packet Forwarder mode is running well
Wi-Fi Wi-Fi Status		Off	Wi-Fi is disabled
		Blue Light	Wi-Fi is enabled
	Cellular Status	Off	SIM card is registering or fails to register
		OII	(or there are no SIM cards inserted)
			Blinking slowly: SIM card has been registered
LTE			and is ready for dial-up
	Cellular Status	Blue Light	Blinking rapidly: SIM card has been registered
		blue Light	and is dialing up now
			Static: SIM card has been registered and dialed
			up successfully
ETH	Ethernet	Off	Disconnected
	Port Status	Blue Light	Static: Connected

2.4 Reset Button

Function	Description				
Function	STATUS LED	Action			
	Static Blue	Press and hold the reset button for more than 5 seconds.			
Reset	Static Blue → Rapidly Blinking	Release the button and wait.			
	Off → Static Blue	The gateway resets to factory default.			

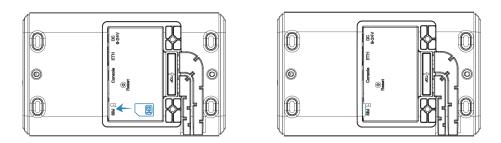
3. Hardware Installation

3.1 SIM Card Installation

A. Use screwdriver to open the protective cover on the back panel of UG65.

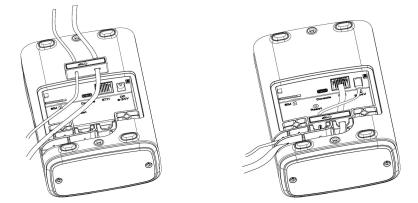
B. Insert the SIM card into the device according to the direction icon on the device. Note:

- If you need to take out the SIM card, press into the SIM card and it will pop up automatically.
- UG65 does not support hot plugging (also called hot swapping). please turn off the power before you insert or take off cards.



3.2 Ethernet Cable & Power Cable Installation

- A. Connect the Ethernet cable and power cable to corresponding interfaces.
- B. Pass two cables through the waterproof silicone and slid into the grooves.
- C. Screw the protective cover back to the device.

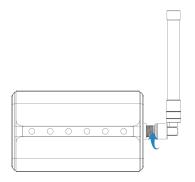


UG6x can also be powered by 802.3af standard PoE injector or other PoE devices. If both connected, DC power is preferred.

Note: When connecting, Ethernet cable of UG65 device side should be installed first, otherwise, PoE devices or gateway may be damaged.

3.3 Antenna Installation

For external antenna version, rotate the antenna into the antenna connector accordingly. The external antenna should be installed vertically always on a site with a good signal.



Note: Please do not let the front panel of products faces to walls if using embedded LoRa antennas.

3.4 Gateway Installation

UG65 can be mounted to a wall or a pole. Before you start, make sure that your SIM card has been inserted, your antennas have been attached and all cables have been installed.

3.4.1 Wall Mounting

Preparation: mounting bracket, bracket fixing screws, wall plugs, wall mounting screws and other required tools.

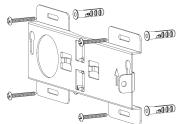
1. Align the mounting bracket horizontally to the desired position on the wall, use a marker pen to mark four mounting holes on the wall, and then remove the mounting bracket from the wall.

Note: The connecting lines of adjacent points are at right angles.

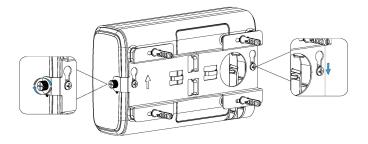
2. Drill four holes with a depth of 32 mm by using your drill with a 6 mm drill bit on the positions you marked previously on the wall.

3. Insert four wall plugs into the holes respectively.

4. Mount the mounting bracket horizontally to the wall by fixing the wall mounting screws into the wall plugs.



5. Screw the bracket fixing screws to the back panel of device, then hang the device to the mounting bracket on the wall.



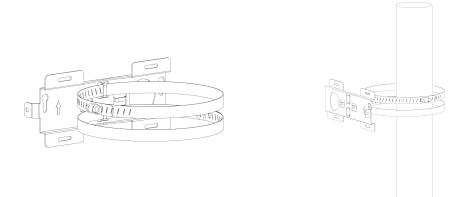
3.4.2 Pole Mounting

Preparation: mounting bracket, bracket fixing screws, hose clamp and other required tools.

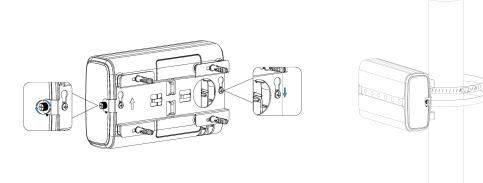
1. Loosen the hose clamp by turning the locking mechanism counter-clockwise.

2. Straighten out the hose clamp and slide it through the rectangular rings in the mounting bracket, wrap the hose clamp around the pole.

3. Use a screwdriver to tighten the locking mechanism by turning it clockwise.



4. Screw the bracket fixing screws to the back panel of device, then hang the device to the mounting bracket on the pole.





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4. Log in the Web GUI of Gateway

UG65 provides web-based configuration interface for management. If this is the first time you configure the gateway, please use the default settings below:

ETH IP Address: **192.168.23.150** Wi-Fi IP Address: **192.168.1.1** Wi-Fi AP: **Gateway_******** Username: **admin** Password: **password**

4.1 Wireless Access

A. Enable Wireless Network Connection on your computer and search for access point "Gateway_******" to connect it.

B. Open a Web browser on your PC (Chrome is recommended) and type in the IP address 192.168.1.1 to access the web GUI.

C. Enter the username and password, click "Login".

📀 Milesight	ŀ
	L
•	٦
Lusername	
Username Password]

If you enter the username or password incorrectly more than 5 times, the login page will be locked for 10 minutes.

D. After logging the web GUI, follow the guide to complete the basic configurations. You can also skip the instructions. It's suggested that you change the password for the sake of security.

MIX.					
G					
-		2	3	4	
sys	LoRa Antenna Type	SMTP Configuration	Contact Information	Change Password	
Ma	Step 1: Choose	Your LoRa Antenna Type			
	Please confirm whether the second sec	nether your device uses external ant	tennas or not, which will affect your p	product signal.	
Re Se	Inter	nal Antenna			
Fin		1	External Ar	ntenna	
E Ha		4	(
Lo: Up		UG65			
CP					
RA		۲	0		
eN		SKip	Next		

			Fo	or your device security,	please change the c	lefault password			
Status		Overview	Packet Forward	Cellular	Network	WLAN	VPN	Host List	Help
Status									Model
Packet Forwarder		System Informa	ation						Show the model name of router.
		Model		UG65-L00E-915M					Region
Network Server				100015					Show the Region of router.
		Region		US915					Serial Number
Network		Serial Number		6221A3128766					Show the serial number of router.
		Firmware Version	ı	60.0.0.23					Firmware Version
System	•	Hardware Versio	n	V1.1					Show the current firmware version of router.
		Local Time		2020-11-24 13:15:0	6 Tuesday				Hardware Version
Maintenance	•	Uptime		21:21:46					Show the current hardware version of router.
100		CPU Load		4%					Local Time
APP	•	RAM (Capacity/A	wailable)	512MB/85MB(16.69	%)				Show the current local time of system.
		eMMC (Capacity	/Available)	3.0G/2.7G(89.51%)					Uptime
							Manual Refr	esh 🗸 Refresh	Show the information on how long the router has been

E. You can view system information and perform configuration of the gateway.

4.2 Wired Access

Connect PC to UG65 ETH port directly or through PoE injector. The following steps are based on Windows 10 operating system for your reference.

A. Go to "Control Panel" \rightarrow "Network and Internet" \rightarrow "Network and Sharing Center", then click "Ethernet" (May have different names).

Network and Sharing Center			>
- 🔶 👻 🛧 🔽 « Network	and Internet > Network and Sharing Center	ٽ ~	Search Control Panel 🔎
Control Panel Home	View your basic network inform	ation and set up o	connections
	View your active networks		
Change adapter settings Change advanced sharing settings	Yeastar5G Private network	pe: Internet pup: Ready to create ions: a∰ Wi-Fi (Yeastar5G)	
	ldentifying	Access t Connect	ype: No network access tions: U Ethernet
	Change your networking settings		
	Set up a new connection or netw Set up a broadband, dial-up, or 1		Ethernet
	Troubleshoot problems	C)
	Diagnose and repair network pro	oblems, or get troubles	hooting information.
See also			
HomeGroup			
Infrared			
Internet Options			
Windows Firewall			

B. Go to "Properties" \rightarrow "Internet Protocol Version 4(TCP/IPv4) "and select "Use the following IP address", then assign a static IP manually within the same subnet of the gateway.

incention i	Protocol Version 4 (TCP,	/IPv4) Properties	
General			
this cap		d automatically if your network suppo need to ask your network administrat	
O	btain an IP address auton	natically	
OU	se the following IP addres	ss:	
IP ac	ddress:	192 . 168 . 23 . 200	
Subr	net mask:	255 . 255 . 255 . 0	
<u>D</u> efa	ault gateway:	192 . 168 . 23 . 150	
00	btain DNS server address	automatically	
OU	se the following DNS serve	er addresses:	
Prefi	erred DNS server:	8.8.8.8	
Alter	mative DNS server:	· · ·	
	alidate settings upon exit	t Advanced	I

C. Open a Web browser on your PC (Chrome is recommended) and type in the IP address 192.168.23.1 50 to access the web GUI.

D. Enter the username and password, click "Login".

		۲	English
	Milesight		
1	Usemame		
•	Password		
	Login		

If you enter the username or password incorrectly more than 5 times, the login page will be locked for 10 minutes.

E. After logging the web GUI, follow the guide to complete the basic configurations. You can also skip the instructions. It's suggested that you change the password for the sake of security.

RSAU	INK					
	0			3		
			2	3	4	
rwarder	j sys	LoRa Antenna Type	SMTP Configuration	Contact Information	Change Password	
	Mo	Step 1: Choose	e Your LoRa Antenna Type			
erver		Please confirm whether the second sec	nether your device uses external an	tennas or not, which will affect your	product signal.	
	Re Se	Inter	nal Antenna	External Ar		
	Fin		1	Excorrigina		
	ь. Ha					
	1 m	1000000				
ice -	> Up		UG65			
	CP					
	RA		•	0		
	eMe.		SKip	Next		
			SKIP	NEA		

F. After guide complete, you can view system information and perform configuration of the gateway.

			For	r your device security, p	please change the d	efault password			
Status		Overview	Packet Forward	Cellular	Network	WLAN	VPN	Host List	Help —
olulus									Model
Packet Forwarder		System Informa	tion						Show the model name of router.
		Model		UG65-L00E-915M					Region
Network Server				line (U.)					Show the Region of router.
Hetholk Gerter		Region		US915					Serial Number
Network	•	Serial Number		6221A3128766					Show the serial number of router.
		Firmware Version		60.0.23					Firmware Version
System	•	Hardware Version		V1.1					Show the current firmware version of router.
		Local Time		2020-11-24 13:15:06	Tuesday				Hardware Version
Maintenance	•	Uptime		21:21:46					Show the current hardware version of router.
APP		CPU Load		4%					Local Time
APP		RAM (Capacity/Av	ailable)	512MB/85MB(16.6%)				Show the current local time of system.
		eMMC (Capacity//	Available)	3.0G/2.7G(89.51%)					Uptime
							Manual Ret	fresh 🗸 Refresh	Show the information on how long the router has been running.

5. Network Configuration

This section explains how to connect the gateway to network via WAN connection, Wi-Fi or cellular.

5.1 Ethernet WAN Configuration

A. Go to "Network" \rightarrow "Interface" \rightarrow "Port" page to select the connection type and configure Ethernet port information.

B. Click "Save & Apply" for changes to take effect.

Port WLAN	Cellular Loopback		
- Port_1			
Enable			
Port	eth 0		
Connection Type	Static IP 🗸		
IP Address	192.168.23.64		
Netmask	255.255.255.0		
Gateway	192.168.23.1		
MTU	1500		
Primary DNS Server	8.8.8.8		
Secondary DNS Server	114.114.114.114		
Enable NAT			
Multiple IP Address			
IP A	ddress	Netmask	Operation
			•

C. Connect Ethernet port of gateway to devices like router or modem.

D. Log in the web GUI via the newly assigned IP address and go to "Status" \rightarrow "Network" to check Ethernet port status.

Overview	P	acket Forward	Cellular	Network	WLAN	VPN	Host List
WAN							
Port	Status	Туре	IP Address	Netmask	Gateway	DNS	Duration
eth 0	up	Static	192.168.23.64	255.255.255.0	192.168.23.1	8.8.8.8	03h 12s

5.2 Wi-Fi Connection Configuration

- A. Go to "Network" \rightarrow "Interface" \rightarrow "WLAN" and select "Client" mode.
- B. Click "Scan" to search for Wi-Fi access point. Select the available one and click "Join Network".

Port	WLAN		Cellular	Loo	pback			
< GoBack								
SSID		Channel	Signal	Cipher	BSSID	Security	Frequency	
AAA		Auto	-61dBm	AES	24:e1:24:f0:c4:13	WPA-PSK/WPA2-PSK	2412MHz	Join Network

C. Type the key of Wi-Fi.

Port	WLAN	Cellular	Loopback	
VLAN				
Enable				
Work Mode		Client	~	Scan
SSID		AAA		
BSSID		24:e1:24:f0:c4	4:13	
Encryption N	lode	WPA-PSK/W	PA2-PSK V	
Cipher		AES	~	
Key		••••••		
IP Setting				
Protocol		DHCP Client	~	

D. Go to "Status" \rightarrow "WLAN" to check Wi-Fi status. If it shows "Connected", it means gateway connects to Wi-Fi successfully.

Overview	Packet Forward	Cellular	Network	WLAN
WLAN Status				
Wireless Status		Enabled		
MAC Address		24:e1:24:f0:de:14		
Interface Type		Client		
SSID		AAA		
Channel		Auto		
Encryption Type		WPA-PSK/WPA2-PSI	к	
Cipher		AES		
Status		Connected		
IP Address		192.168.1.145		
Netmask		255.255.255.0		
Connection Duration	on	0 days, 02:44:45		

5.3 Cellular Connection Configuration

- A. Go to "Network" \rightarrow "Interface" \rightarrow "Cellular" \rightarrow "Cellular Setting" page to enable cellular settings.
- B. Choose relevant network type and fill in SIM card information like APN or PIN code.
- C. Click "Save" and "Apply" for changes to take effect.

Port	WLAN	Cellular	Loopback
Cellular Se	etting		
Enable			
Network Ty	pe	Auto	~
APN			
Username			
Password			
Access Nu	mber		
PIN Code			
Authenticat	ion Type	Auto	~
Roaming			
SMS Cente	er		
Connectio	n Setting		
Enable NA	Г		

D. Go to "Status" \rightarrow "Cellular" page to view the status of the cellular connection. If it shows "Connected", it means the SIM has dialed up successfully. On the other hand, you can check the status of LTE indicator. If it keeps on blue light statically, it means SIM has dialed up successfully.

Overview	Packet Forward	Cellular	Network	WLAN
Modem				
Status		Ready		
Model		EC25		
Version		EC25ECGAR06A07M	1G	
Signal Level		23asu (-67dBm)		
Register Status		Registered (Home net	w <mark>or</mark> k)	
IMEI		860425047368939		
IMSI		460019425301842		
ICCID		898601178380099341	20	
ISP		CHN-UNICOM		
Network Type		LTE		
PLMN ID				
LAC		5922		
Cell ID		340db83		
Network				
Status		Connected		
IP Address		10.132.132.59		
Netmask		255.255.255.240		
Gateway		10.132.132.60		

6. Packet Forwarder Configuration

UG65 has embedded multiple packet forwarders like Semtech and Chirpstack Generic MQTT broker. This section explains how to connect the gateway to third-party network servers.

Make sure the gateway connects to the network as shown in <u>Section 5</u>.

A. Go to "Packet Forwarder" \rightarrow "General" page and click + to add a network server.

Status		General	Radios	Advanced	Custom	Traffic		
Packet Forwarder		General Setting						
Network Server		Gateway EUI Gateway ID	24E1					
Network	•	Frequency-Sync	Dis	abled	~			
System	•	Multi-Destination						
Maintenance	•		1D 0	Enable		Type Ursalink	Server Address	Operation
APP	×							•
		Save & Apply						

B. Fill in the server information and enable this server.

Туре	Semtech •	
Server Address	router.eu.thethings.network	
Port Up	1700	
Port Down	1700	

C. Go to "Packet Forwarder" \rightarrow "Radio" page to configure antenna type, center frequency and channels. The channels of the gateway and network server need to be the same.

General	Radios	Advanced	Custom	Traffic
Antenna Type				
	Inte	ernal Antenna		External Antenna
		UG65		
		•		0

Region		US915		~
	Name			Center Frequency/MHz
	Radio 0		[904.3
	Radio 1		[905.0
Multi Channels Settin	g			
Enable	Index	Radio		Frequency/MHz
	0	Radio 0	*	903.9
	1	Radio 0	~	904.1
	2	Radio 0	~	904.3
	3	Radio 0	~	904.5
	4	Radio 1	~	904.7
	5	Radio 1	~	904.9
	6	Radio 1	*	905.1
	7	Radio 1	~	905.3

D. Add the gateway on network server page. Take TTN for example, type and save the gateway EUI and other information when you connect it via Semtech packet forwarder. After you add the gateway, TTN will show connection status.

EGISTER GATEWAY	
Gateway EUI	
The EUI of the gateway as read from the LoRa module	
24 E1 24 FF FE TO 19 9	👩 8 byte
I'm using the legacy packet forwarder Select this if you are using the legacy <u>Semtech packet forwarder</u> .	
I'm using the legacy packet forwarder Select this if you are using the legacy <u>Semtech packet forwarder</u> . Description A human-readable description of the gateway	
Select this if you are using the legacy <u>Semtech packet forwarder</u> . Description	
Select this if you are using the legacy <u>Semtech packet forwarder</u> . Description	

E. Go to "Traffic" page to view the data communication of UG65.

General	Radio	os Adv	anced	Custom	Traffic			
Traffic Set	tting							
Stop	CI	ear						
Rfch	Direction	Time	Ticks	Frequency	Datarate	Coderate	RSSI	SNR
0	up	05:57:30	212136749 3	903.9	SF10BW125	4/5	-51	13.2
0	up	05:57:29	211944923 1	904. <mark>5</mark>	SF7BW125	4/5	-95	8.5
0	up	05:57:13	210431205 7	904.6	SF8BW500	4/5	-51	11.5
0	up	05:57:06	209699855 6	903.9	SF7BW125	4/5	-65	14.2

7. Network Server Configuration

UG65 can work as network server and transmit data to Milesight IoT Cloud or other platform via MQTT/HTTP/HTTPS.



A Make sure the gateway connects to the network as shown in <u>Section 5</u>.

7.1 Connect UG65 to Milesight IoT Cloud

A. Go to "Packet Forwarder" \rightarrow "General" page to enable the "Milesight" type server.

Status	General	Radios	Advanced	Custom	Traffic	
Packet Forwarder	General Setting					
Network Server	Gateway EUI Gateway ID	24E124FF				
Network	Frequency-Sync	Disabled	~			
System	Multi-Destination					
Maintenance			Enable Enabled	Type Milesight	Server Address	Operation
APP						H

B. Go to "Packet Forwarder" → "Radio" page to select the antenna type, center frequency and channels. The channels of the gateway and nodes need to be the same.

Region		US915		~
	Name			Center Frequency/MHz
	Radio 0			904.3
	Radio 1			905.0
Multi Channels Settin	g			
Enable	Index	Radio		Frequency/MHz
	0	Radio 0	~	903.9
	1	Radio 0	~	904.1
	2	Radio 0	~	904.3
	3	Radio 0	~	904.5
	4	Radio 1	~	904.7
	5	Radio 1	~	904.9
	6	Radio 1	*	905.1
	7	Radio 1	~	905.3

C. Go to "Network Server" → "General" page to enable the network server and "Milesight IoT Cloud" mode.

Status	General	Applications	Profiles	Device	Gateways
Packet Forwarder	General Setting	9			
Network Server	Enable Milesight IoT Clo	vud 🔽			
Network 🕨	NetID	010203			
	Join Delay	5	3	sec	
System 🕨	RX1 Delay	1		sec	
Maintenance	Lease Time	8760-0-0	1	nh-mm-ss	
	Log Level	info	~		

D. Log in the Milesight IoT Cloud. Then go to "My Devices" page and click "+New Devices" to add gateway to Milesight IoT Cloud via SN. Gateway will be added under "Gateways" menu.

\otimes	Q <u>真实设备-EN</u> 6136A39023 UC3X52-虚 61151109	Add Device * SN:	Normal 1	🛱 Alarm 1	ঠ্যা Offline 1	© Inactive 3		+ New Device
	6136A39023 UC3X52-虚					×	÷	@ M @
\otimes		* SN:						
		* Name :				sociated with your		© <u>v</u> ©
)) Al	UC3X5 6123A124	* Name.					15 minutes ago	@ M @
鲎	AM102- 6128A2175	CO2	TVOC		Confirm Barometric Pressure	ux iination	a few seconds ago	<u>۵</u> ۲ ۵
	4	27°C Temperature	51% Humidity			2lux Illumination		
		6128A2175	AM102- 6128A2173xxx CO2 27°C	AM102- 6128A2175	Cancel	AM102- 6128A2175	AM102- 6128A2175	Cancel Confirm AM102- 6128A2175 CO2 TVOC Barometric Pressure 27°C 51% 0 2lux

E. The gateway is online on Milesight IoT Cloud.

② Dashboard	Devices Gateways	History +	
My Devices	Search Q	⊘ Normal 1 🛛 M Offline 0 💿 Inactive 1	+ New Devices
Map	Status Name	Associated Devices (Joined /Not Joined /Failed)	Last Updated
Reports	UG85-915 621694470052	2/2/0 <u>More</u>	· @ M ①
Event Center 30	UG8555 6217A3163763	Device is not bound, please power on the device, after that, it will be associated with your account automatically	2020-08-18 16:42 🛞 🗠 🛈
🖄 Sharing Center			



www.milesight-iot.com

7.2 Connect UG65 to MQTT/HTTP Server

A. Go to "Packet Forwarder" \rightarrow "General" page to enable the "Milesight" type server.

Status	General	Radios	Advanced	Custom	Traffic	
Packet Forwarder	General Setting					
Network Server	Gateway EUI Gateway ID	24E124FF				
Network 🕨	Frequency-Sync	Disabled	*			
System 🕨	Multi-Destination					
Maintenance	ID 0		Enable Enabled	Type Milesight	Server Address	Operation
APP 🕨						8

B. Go to "Packet Forwarder" \rightarrow "Radio" page to select the antenna type, center frequency and channels. The channels of the gateway and nodes need to be the same.

Region		US915		~
	Name			Center Frequency/MHz
	Radio 0		9	04.3
	Radio 1		9	05.0
Multi Channels Settin	g			
Enable	Index	Radio		Frequency/MHz
	0	Radio 0	~	903.9
	1	Radio 0	~	904.1
	2	Radio 0	~	904.3
	3	Radio 0	~	904.5
	4	Radio 1	~	904.7
	5	Radio 1	~	904.9
	6	Radio 1	~	905.1
		F		905.3

C. Go to "Network Server" \rightarrow "General" page to enable the network server mode.

Status	General	Applications	Profiles	Device	Gateways
Packet Forwarder	General Setting				
	Enable				
Network Server	Milesight IoT Clou	id 🗌			
Network •	NetID	010203			
	Join Delay	5		sec	
System 🕨	RX1 Delay	1		sec	
	Lease Time	876000-0-	-0	hh-mm-ss	
Maintenance	Log Level	info		~	

D. Go to "Network Server" \rightarrow "Application" to add a new application.

Status	General	Applications	Profiles	Device
Packet Forwarder	Applications			
	Name	cle	oud	
Network Server	Description	clo	oud	
Network •	Payload Codec	N	lone	~

After saving the application, you can select HTTP, HTTPS or MQTT protocol and fill in correspond server information to send data to another server.

Data Transmission		
Туре	MQTT	۲
Status	HTTP MQTT HTTPS	
General		
Broker Address		
Broker Port		
Client ID		
Connection Timeout/s	30	
Keep Alive Interval/s	60	

E. Go to "Profiles" page to add a new profile for the device.

General	Applications	Profiles	Device	Packets
Device Profiles				
Name	Clas	sA-OTAA		
Max TXPower	0			
Join Type	OTA	A	•	
Class Type	Clas	as A	•	
Advanced				

General	Applications	Profiles	Device	Gateways	Packet	ts
Device Profiles	5					
	Name	Max TXPower	Join Type		Class Type	Operatio n
	ClassA-OTAA	0	OTAA		Class A	2 ×
						8

F. Go to "Device" page and click "Add" to add LoRaWAN® node devices.

Device Name uc11 Description a short description of your node Device EUI 0000000000000 Device-Profile ClassA-OTAA Application cloud Application Key Device Address Network Session Key Device Adplication Session Key Uplink Frame-counter 0	General	Applications	Profiles	Device	Gateways	Packets	
Device Name Device EUI Device-Profile Application Last Seen Activated Operation No matching records found	Device						
Device Name uc11 Device Name uc11 Device EUI 0000000000000 Device EUI 0000000000000 Device Profile ClassA-OTAA Application Image: ClassA-OTAA Application Image: ClassA-OTAA Application Image: ClassA-OTAA Application Image: ClassA-OTAA Application Key Image: ClassA-OTAA Device Address Image: ClassA-OTAA Network Session Key Image: ClassA-OTAA Uplink Frame-counter Image: ClassA-OTAA Output Image: ClassA-OTAA Output Image: ClassA-OTAA Image: ClassA-OTAA Image: ClassA-OTAA	Add	Bulk Import	Delete All			Search	0
Device Name uc11 Description a short description of your node Device EUI 0000000000000 Device-Profile ClassA-OTAA Application • Frame-counter Validation • Application Key • Device Address • Network Session Key • Uplink Frame-counter 0	Device Name	Device EUI	Device-Profile	Application	Last Seen	Activated	Operation
Device Nameuc11Descriptiona short description of your nodeDevice EUI0000000000000Device-ProfileClassA-OTAA •Applicationcloud •Frame-counter Validation•Application Key•Device Address•Network Session Key•Uplink Frame-counter0			No m	atching records found	l.		
Device Nameuc11Descriptiona short description of your nodeDevice EUI0000000000000Device-ProfileClassA-OTAA •Applicationcloud •Frame-counter Validation•Application Key•Device Address•Network Session Key•Uplink Frame-counter0							
Device Nameuc11Descriptiona short description of your nodeDevice EUI0000000000000Device-ProfileClassA-OTAA •Applicationcloud •Frame-counter Validation•Application Key•Device Address•Network Session Key•Uplink Frame-counter0						_	
Device EUI 000000000000000 Device-Profile ClassA-OTAA Application cloud Frame-counter Validation Application Key Device Address Network Session Key Application Session Key Uplink Frame-counter		Dev	rice Name	uc11		×	
Device-Profile ClassA-OTAA Application cloud Frame-counter Validation Application Key Device Address Network Session Key Application Session Key Uplink Frame-counter		Des	cription	a short description of yo	ur node		
Application Frame-counter Validation Application Key Device Address Network Session Key Application Session Key Uplink Frame-counter		Dev	rice EUI	00000000000000000			
Frame-counter Validation Application Key Device Address Network Session Key Application Session Key Uplink Frame-counter		Dev	rice-Profile	ClassA-OTAA	Ŧ		
Application Key Device Address Network Session Key Application Session Key Uplink Frame-counter		App	lication	cloud	*		
Device Address Device Address Network Session Key Application Session Key Uplink Frame-counter 0				0			
Network Session Key Application Session Key Uplink Frame-counter							
Application Session Key Uplink Frame-counter							
Uplink Frame-counter							
Uownink rrame-counter 0		Dov	vnlink Frame-counter	0			
				Save & Apply			

You can also click "Bulk Import" if you want to add many nodes all at once.

Import File	Browse Import Template Download

Click "Template Download" to download template file and add device information to this file. Application and device profile should be the same as you created on web page.

- 24	A	В	C	D	E	F	G	Н	1
1	name	description	deveui	application	deviceprofile	appkey	devaddr	appskey	nwkskey
2	24e1242191323266		24e1242191323266	cloud	ClassC-OTAA	112233445566778899aa112233445566			
3									
4									
5									

Import this file to add bulks of devices.

F. Go to "Packets" page to check the packets from LoRaWAN[®] node devices. The type starts from "Up" means uplinks and "Dn" means downlinks.

General	Appli	cations	Profile	s	Devic	e	Pi	ackets		
end Data To I	Device									
Dev	ice EUI		Туре			Į.	Payload		Port	Confirme
000000000000	00000		ASCII	•						
Send etwork Serve	r									
	r I								Search	Q
etwork Serve	1	Frequency	Datarate	SNR	RSSI	Size	Fcnt	Туре	Search	Q
etwork Serve Clear	JI F	Frequency	Datarate SF7BW125		RSSI -85	Size 4	Fcnt 14	Type UpUnc		

Click "Details" to check the properties and payload contents of packets.

Packets Details		*
Fcnt	14	*
Port	85	
Modulation	LORA	
Bandwidth	125	
SpreadFactor	7	
Bitrate	0	
CodeRate	4/5	
SNR	8.5	
RSSI	-85	
Power	5	
Payload(b64)	A3cYAA==	
Payload(hex)	03771800	
MIC	f5acdeb2	

[END]



Dataprodukter utöver det vanliga