

Milesight UG56-868M

Milesight UG56-868M IoT LoRaWAN Gateway Wi-Fi User Manual

Model: UG56-868M

1. PRODUCT OVERVIEW

The Milesight UG56-868M is an industrial IoT LoRaWAN gateway designed for robust and reliable data transmission in various applications. It supports Wi-Fi connectivity for flexible deployment and efficient data backhaul. This manual provides comprehensive instructions for setting up, operating, maintaining, and troubleshooting your gateway.



Image 1.1: Front view of the Milesight UG56-868M LoRaWAN Gateway. The device is a compact, rectangular unit with a white and black casing. It features LED indicators for POWER, STATUS, LoRa, Wi-Fi, and ETH, along with the Milesight logo and model number UG56. An antenna is connected to the right side.

2. PACKAGE CONTENTS

Please check the package carefully to ensure all items are present and undamaged. If any item is missing or damaged, please contact your vendor.

- 1 x Milesight UG56-868M LoRaWAN Gateway
- (Note: Typical packages may also include a power adapter, mounting kit, and antenna, depending on the specific product variant.)

3. SAFETY INFORMATION

To ensure safe operation and prevent damage, please observe the following safety precautions:

- Do not expose the device to water or moisture.
- Do not attempt to open or modify the device.
- Use only the power adapter supplied or recommended by Milesight.
- Ensure proper ventilation around the device to prevent overheating.
- Keep the device away from strong electromagnetic fields.

4. SETUP

4.1 Physical Installation

1. **Choose a Location:** Select a central location for the gateway, preferably at a higher elevation, to maximize LoRa signal coverage. Avoid placing it near large metal objects or other electronic devices that may cause interference.
2. **Attach Antenna:** Carefully screw the provided LoRa antenna onto the SMA connector on the side of the gateway. Ensure it is finger-tight.
3. **Mounting (Optional):** If wall-mounting or pole-mounting, use the appropriate mounting kit (sold separately) and follow its instructions.

4.2 Power Connection

1. Connect the power adapter to the DC power input port on the gateway.
2. Plug the power adapter into a standard electrical outlet. The POWER LED indicator on the front panel should illuminate.

4.3 Network Connection

The UG56-868M supports both Ethernet and Wi-Fi for backhaul connectivity.

Ethernet Connection:

- Connect an Ethernet cable from the gateway's ETH port to your router or network switch. The ETH LED indicator should illuminate.

Wi-Fi Connection:

- Upon initial power-up, the gateway may broadcast a default Wi-Fi SSID (e.g., "Milesight_Gateway_XXXX").
- Connect your computer or mobile device to this Wi-Fi network.
- Open a web browser and navigate to the default IP address (e.g., <http://192.168.23.150>) to access the gateway's web interface for configuration.
- Refer to the "Operating" section for initial configuration steps.

5. OPERATING

5.1 LED Indicators

The front panel of the UG56-868M features several LED indicators to show the device's status:

- **POWER:** Solid green when the device is powered on.
- **STATUS:** Indicates system status (e.g., blinking during boot, solid when ready).
- **LoRa:** Indicates LoRaWAN activity (e.g., blinking when receiving LoRa packets).
- **Wi-Fi:** Indicates Wi-Fi network status.
- **ETH:** Indicates Ethernet network status.

5.2 Initial Configuration (Web Interface)

After connecting to the gateway's network (via Ethernet or Wi-Fi), you can access its web interface for detailed configuration.

1. Open a web browser and enter the gateway's IP address (default:<http://192.168.23.150>).
2. Enter the default username and password (refer to the label on the device or the quick start guide for default credentials).
3. Upon successful login, you will be prompted to change the default password for security reasons. It is highly recommended to do so.
4. Navigate through the web interface to configure network settings (Wi-Fi SSID/password, static IP), LoRaWAN server settings (e.g., Network Server address), and other advanced features.

6. MAINTENANCE

6.1 Firmware Updates

Regularly check the Milesight official website for the latest firmware versions. Firmware updates can provide new features, performance improvements, and security patches.

- Download the firmware file from the Milesight support portal.
- Access the gateway's web interface.
- Navigate to the "System" or "Maintenance" section and locate the firmware upgrade option.
- Upload the downloaded firmware file and follow the on-screen instructions. Do not power off the device during the upgrade process.

6.2 Cleaning

Clean the exterior of the gateway with a soft, dry cloth. Do not use liquid cleaners or aerosol sprays.

7. TROUBLESHOOTING

This section provides solutions to common issues you might encounter.

Problem	Possible Cause	Solution
Gateway not powering on (POWER LED off)	No power supply; faulty power adapter; loose connection.	Check power outlet; ensure power adapter is securely connected to both the gateway and the outlet; try a different power adapter if available.
Cannot access web interface	Incorrect IP address; network connectivity issue; firewall blocking access.	Verify the gateway's IP address; ensure your computer is on the same network segment; temporarily disable firewall; try a different browser.
LoRa devices not connecting	Incorrect LoRaWAN server settings; antenna not connected; device out of range; frequency mismatch.	Verify LoRaWAN server configuration in the gateway's web interface; ensure antenna is securely attached; check device range and signal strength; confirm frequency plan (868MHz for this model).
Wi-Fi/Ethernet LED off	Cable disconnected; network configuration error; Wi-Fi disabled.	Check Ethernet cable connection; verify Wi-Fi settings in the web interface; ensure Wi-Fi is enabled.

Problem	Possible Cause	Solution
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8. SPECIFICATIONS

Feature	Detail
Brand	Milesight
Model Number	UG56-868M
ASIN	B0DF5QLBN2
LoRa Frequency	868 MHz (EU868)
Connectivity	Wi-Fi, Ethernet
Color	Black
Item Weight	8.36 pounds (approximately 3.79 kg)
Package Dimensions	3.94 x 0.79 x 0.39 inches (approximately 10 x 2 x 1 cm)
Manufacturer	Milesight
Date First Available	August 25, 2024


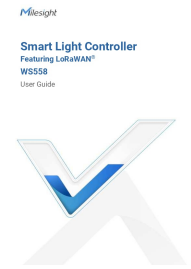




9. WARRANTY AND SUPPORT

Milesight products are typically covered by a limited warranty. For specific warranty terms and conditions, please refer to the warranty card included with your product or visit the official Milesight website.

For technical support, firmware downloads, or further assistance, please contact Milesight customer support or visit their official support portal:

- **Milesight Official Website:** www.milesight.com
- **Support Contact:** Refer to the website for regional contact information.

Related Documents - UG56-868M

	<p>Milesight UG56 Industrial LoRaWAN Gateway User Guide</p> <p>Comprehensive user guide for the Milesight UG56 Industrial LoRaWAN Gateway, detailing its features, specifications, configuration, and application examples for IoT deployments.</p>
	<p>Milesight WS558 Smart Light Controller User Guide</p> <p>User guide for the Milesight WS558 LoRaWAN® Smart Light Controller, detailing its features, hardware, operation, LoRaWAN and D2D settings, maintenance, installation, device payload, sensor data, and downlink commands.</p>
	<p>Milesight UG67 Outdoor LoRaWAN Gateway Quick Start Guide</p> <p>A concise guide to installing and configuring the Milesight UG67 Outdoor LoRaWAN Gateway, covering hardware setup, network connection, and basic configuration.</p>
	<p>Milesight UG65 Semi-industrial LoRaWAN Gateway Quick Start Guide</p> <p>Quick start guide for the Milesight UG65 Semi-industrial LoRaWAN Gateway, covering safety precautions, hardware introduction, installation, network connection, and configuration for IoT deployments.</p>
	<p>Milesight UG65 Semi-industrial LoRaWAN® Gateway User Guide</p> <p>User guide for the Milesight UG65 Semi-industrial LoRaWAN® Gateway, detailing its features, configuration, and operation for network planners, technical support, and administrators. Covers product introduction, web GUI access, network settings, protocol integration, system management, and application examples.</p>
	<p>Milesight UC51x Series LoRaWAN Solenoid Valve Controller User Guide</p> <p>Comprehensive user guide for the Milesight UC51x Series LoRaWAN Solenoid Valve Controller, detailing hardware, operation, LoRaWAN configuration, maintenance, installation, and Milesight IoT Cloud management.</p>