User Guide

FlashLink®

BLE Mobile Gateway

Model 40993

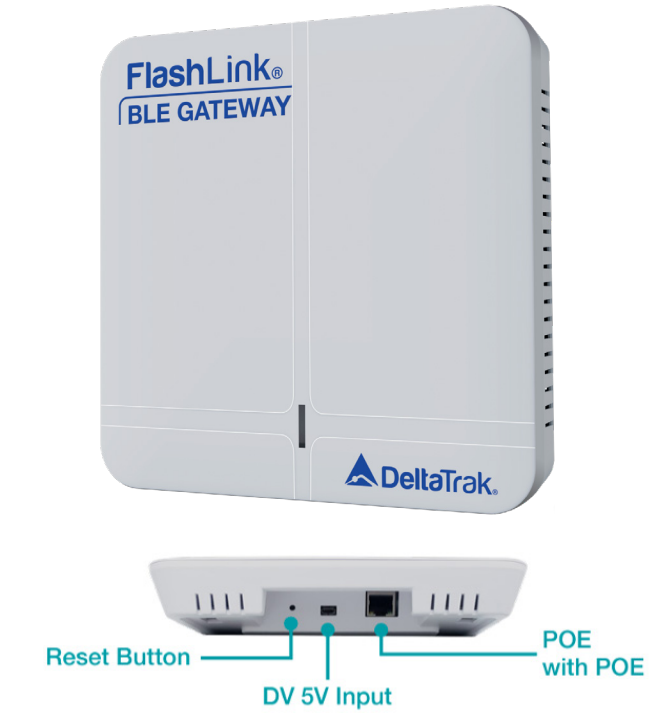
DeltaTrak®

Box Contents

Front


Back

1. BLE Gateway
2. Mounting bracket
3. Power over ethernet cable



1.1 Power Supply Interface

The Gateway supports two power input options:

- Ethernet – IEEE 802.3af compliant
- Micro USB (DC 5V / 1A)

PoE Power

Connect a PoE-enabled Ethernet cable to the Ethernet port. The device must be powered by an IEEE 802.3af compliant PoE source.

Micro USB Power

Connect a regulated 5V / 1A DC power supply to the Micro USB port.

⚠Warning

Use only **one power source at a time**. Do not connect PoE and Micro USB simultaneously. Doing so may damage the Gateway.

1.2 LED Indicators

The Gateway supports two power input options: Red and Green.

RED LED

Status: Fast Flash (3 times per second)
Meaning: Gateway is booting
Slow Flash: (once every 2 seconds)
Meaning: Boot successful, but no cloud connection

GREEN LED

Status: Flash Every 2 Seconds
Meaning: Connected to cloud and receiving BLE advertisement packets
Slow Flash: Flash every 10 seconds
Meaning: Connected to cloud, but no BLE devices detected

1.3 Reset Button

Short press (< 3 seconds): Reboots the Gateway
Long press (> 5 seconds): Restores factory settings

After a factory reset, all network settings (Wi-Fi, static IP, disabled AP mode, etc.) must be reconfigured.

2.1 Pole Mounting Instructions

1. Choose a suitable pole or Structure column
   - Diameter must match the mounting bracket specification
   - Pole must be vertical, stable, and free of corrosion

2. Position the mounting bracket
   - Hold the bracket at the target height (15–25 ft)

3. Attach using clamps or U-bolts
   - Wrap the stainless-steel hose clamps/U-bolts around the pole
   - Tighten evenly until the bracket is rigid and does not rotate

4. Mount the gateway
   - Attach the gateway to the bracket per the mounting design
   - Ensure all fasteners click or lock into place

5. Environmental & Orientation Guidelines
   - Mount with the gateway facing outward and free of obstructions.
   - Avoid mounting inside metal enclosures or behind thick concrete, which can reduce signal.
   - Protect cabling using conduit or UV-resistant cable ties.
   - Maintain drip loops on any outdoor cables to prevent water intrusion.

6. Final Verification. After Installation:
    - Confirm the gateway powers on and passes self-check (LEDs or display indicators).
    - Validate network connectivity and signal strength at the installation location.
    - Document the Device ID/Mac ID, mounting location and height for future maintenance.

2.2 Mounting Height Requirements

1. Install the gateway at an elevation between 15 ft and 25 ft above ground level.

2. This elevation improves radio signal propagation and minimizes ground-level interference.

2.3 Approved Mounting Surfaces

1. The gateway may be installed on:
    - A wall or ceiling (interior)
    - A pole or column

    (structure column, utility pole, equipment mast, or dedicated mounting pole)

Both methods require secure installation using proper hardware to ensure long-term stability.

2.4 Wall / Ceiling Mounting Instructions

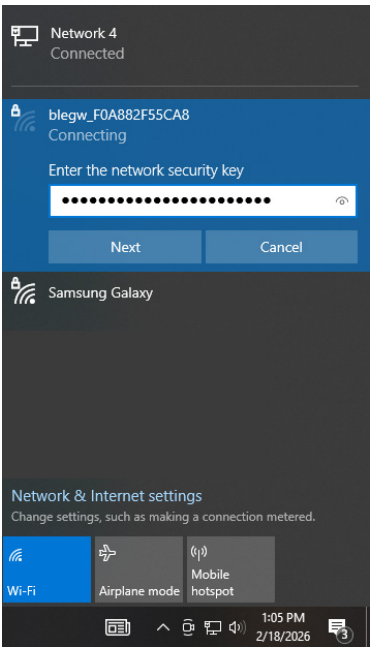
1. Select the mounting locations
    - Height: 15–25 ft
    - Surface must be flat and structurally sound
    - Ensure clear line of sight where possible

    (minimize obstructions) Both methods require secure installation using proper hardware to ensure long-term stability.

3.1 Accessing the Gateway User Interface

1. Ensure the Gateway is powered **ON**.
2. Using a computer (Wi-Fi enabled) or mobile device, connect to the Gateway's Wi-Fi network:

   SSID format:
   beacongw_[MAC]
   Example: beacongw_304A2657E4EC

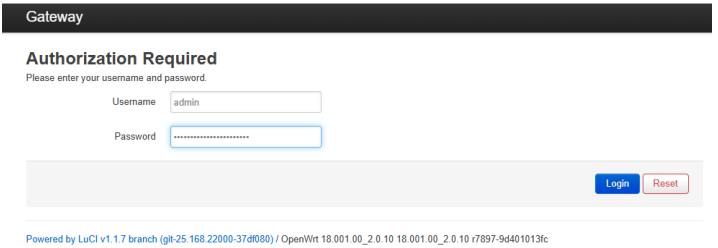


3. Enter the Wi-Fi password
   wf8tdqz!3r5nt4ht#cco5qi
4. Open a web browser and navigate to:
   192.168.8.1

5. Enter login credentials

Username: admin

Password: ptzem655#i44epdm2!usvvl



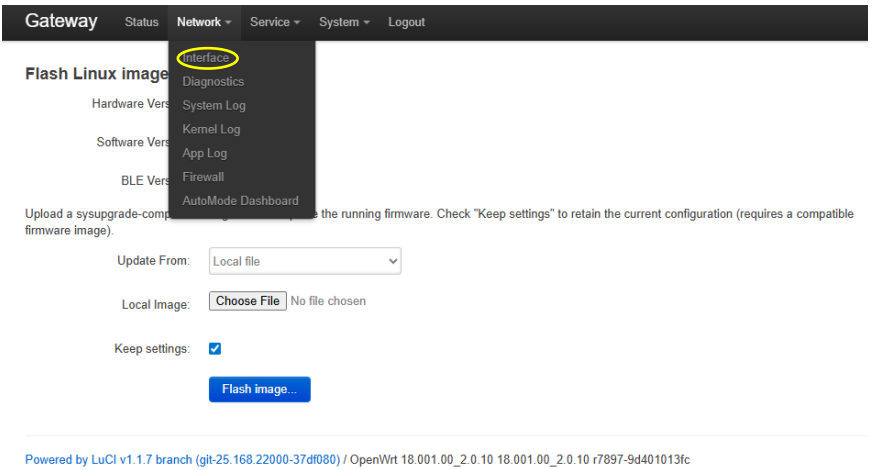
6. Click **Login** to access the configuration interface.

Network Configuration

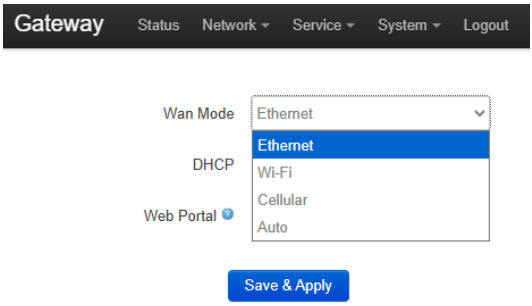
4.1 Ethernet Setup

The device is configured for Ethernet by default.

1. Navigate to **Network > Interface**



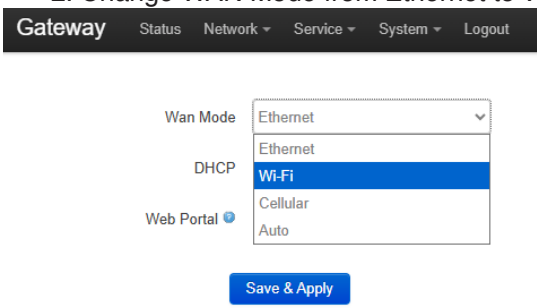
2. Under WAN Mode, select **Ethernet**



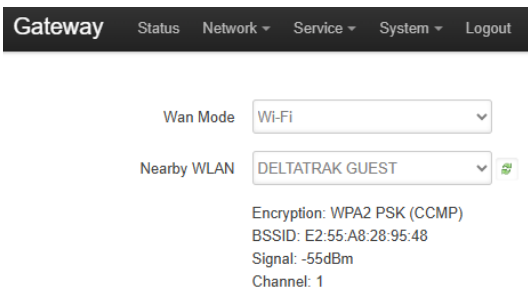
3. Click **Save & Apply**
4. The Gateway will reboot
5. **RED LED** will flash during boot
6. Confirm the **GREEN LED** begins flashing to verify cloud connection

4.2 WiFi Setup

1. Navigate to **Network > Interface**
2. Change WAN Mode from Ethernet to Wi-Fi

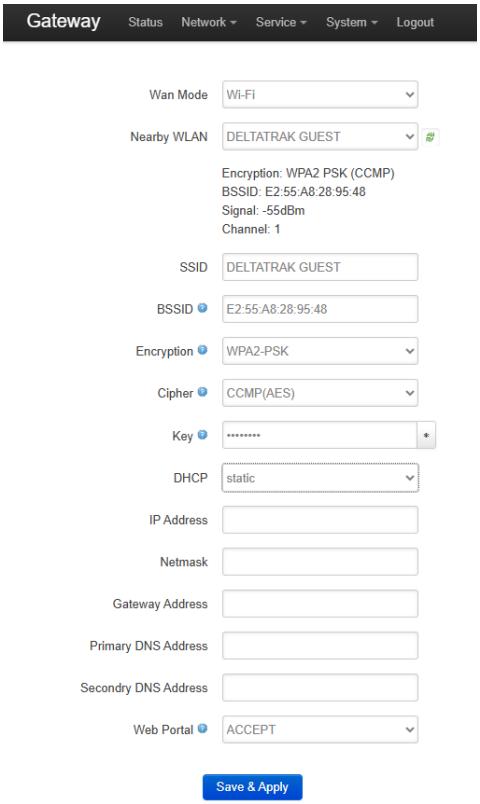


3. Click **Save & Apply**
4. The Gateway will reboot
5. **RED LED** will flash during boot
6. Confirm the **GREEN LED** begins flashing to verify cloud connection



4.3 Static IP Configuration

1. Navigate to **Network > Interface**
2. Change DHCP to Static
3. Enter required IP configuration parameters



4. Click **Save & Apply**
5. Wait for the Gateway to reboot (up to 2 minutes)

4.4 LED Behavior

- **GREEN FLASHING:** Connected successfully
- **RED FLASHING:** Network access blocked or no internet access

Ensure:

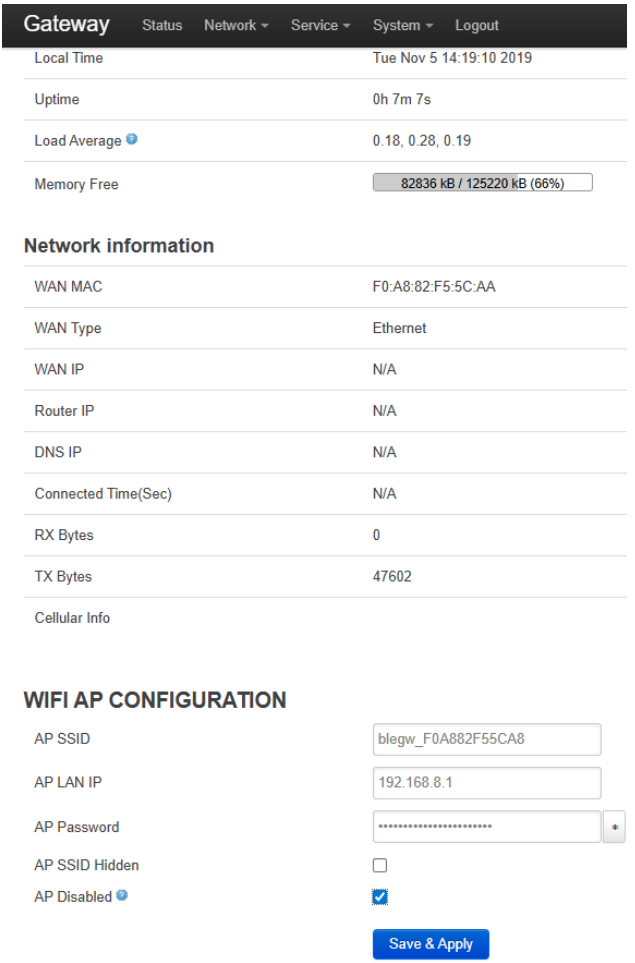
- The IP address is not already in use
- Gateway is permitted through the firewall

Disabling the Ad-Hoc (AP) Wi-Fi Network

The Gateway broadcasts a local configuration Wi-Fi network (AP mode) by default.

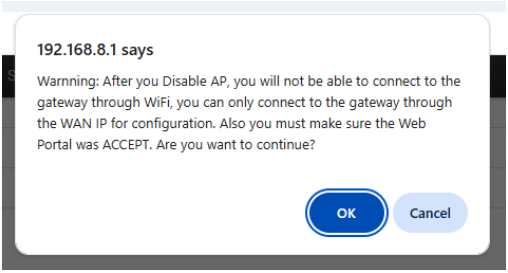
If disabled:

- The interface can only be accessed through the local network using the device's IP address.
- Factory reset will re-enable AP mode.

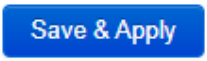


To disable AP mode:

1. Scroll to the bottom of the Status page
2. Check the AP Disabled box
3. Confirm the warning popup



4. Click **Save & Apply.** Ad-hoc Wi-Fi is now disabled.



5.1 Remote Firmware Updates

Firmware updates are typically deployed automatically by DeltaTrak.

For questions, contact:

EO: sales@eofirm.com I www.eofirm.com I 0755-84200058

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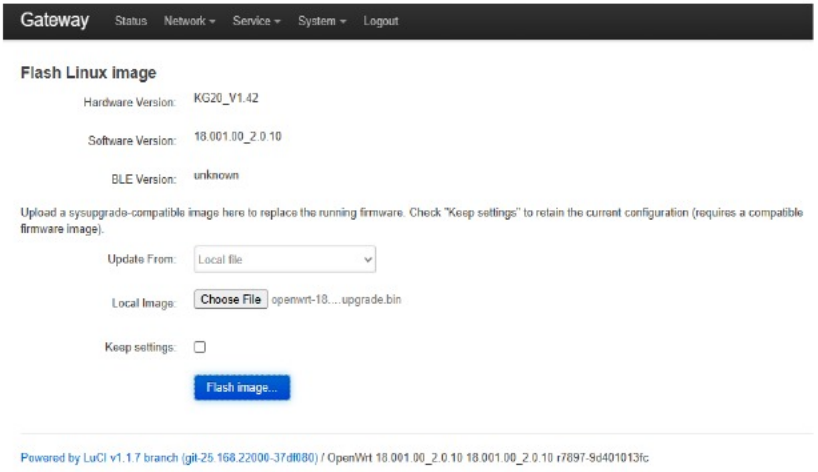
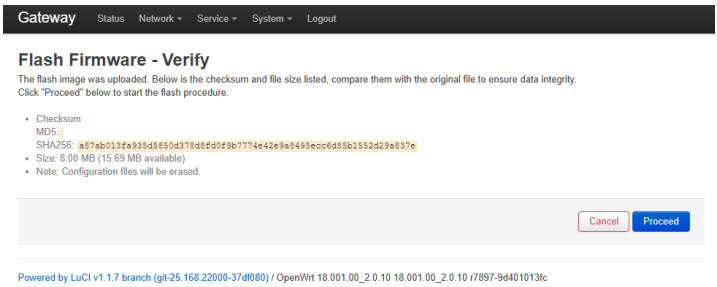
5.2 Local Firmware Update

1. Navigate to **System Update > Firmware Update**



2. Select Update from: Local File
3. Upload the firmware file
4. Verify SHA256 checksum (compare first and last digits with provided file)
5. Choose one:
   Keep Settings (retain configuration)
   ☐ Uncheck to use default settings
6. Click Flash Image

⚠ Do not remove power during update.



7. Wait approximately 4 minutes for automatic reboot

Verify Update

- Return to the firmware page
- Confirm updated firmware version is displayed
- Verify Green LED is flashing (cloud connected)

6.1 Remote Firmware Updates

For secured networks, allow outbound access to:
MQTT Broker:
mqtt.flashtrakrtl.com
TCP Port: 8092

6.2 Required Firewall Rules

Protocol	Port	Purpose
ICMP	—	Ping (connectivity test)
UDP	123	NTP time synchronization
UDP	53	DNS resolution
TCP	8092	MQTT cloud connection

6.3 Startup Connectivity Sequence

1. Gateway pings configured DNS server (May also ping 8.8.8.8)
2. Sends NTP request (UDP 123)
3. Performs DNS lookup for mqtt.flashtrakrtl.com
4. Establishes MQTT connection (TCP 8092)
5. Authenticates using preconfigured credentials and SSL certificates

Firewalls must allow both outbound requests and inbound responses.

7.1 Cloud Connection Issues

Symptom: No LED

1. Verify power source
2. Confirm only one power method is connected
3. If still no LED, device may be defective.
   Please contact support for assistance.

Symptom: RED LED Flashing

Indicates no cloud connection. Check:

1. Network configuration (Ethernet vs Wi-Fi)
2. Correct Wi-Fi credentials
3. Static IP configuration accuracy
4. Firewall rules (see Section 6)
5. Physical cable connections
6. Use Network > Diagnostics for log review.
7. Wi-Fi signal strength (move device closer to router)
8. Static IP conflicts

If issue persists, contact support.

7.2 BLE Logger Issues

Symptom: No Data from BLE Logger

1. Confirm logger is powered ON
2. Troubleshoot physical connection disruption between the logger and gateway by moving logger close to the Gateway without any other obstacles for at least 30 minutes
3. Check last known battery level of the logger
4. Verify Gateway firmware is current
5. Inspect logger for physical damage

If issue persists, contact support

Troubleshooting

Mobile App Verification

Use FlashTrak BLink (iOS / Android) to:

- Sync logger manually
- Verify logger functionality

If logger works via mobile app but not Gateway, investigate:

- Signal interference
- Gateway placement
- Firmware compatibility

Gateway Reset

- Short press: Reboot
- Long press: Factory reset (network settings must be reconfigured)

Support

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