

# **AirgainConnect® Fleet™ 5G Vehicle Gateway User Guide**

Airgain, Inc

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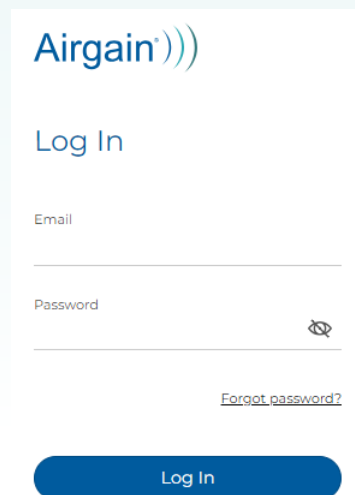
## 1. Introduction

The AC-Fleet 5G Vehicle Gateway is an integrated 5G modem, Wi-Fi 6 router, Gigabit Ethernet, and high-performance antenna solution designed for mounting to the roof of any vehicle. Please ensure the device is only installed by a professional following Airgain's installation instructions.

Local configuration of AC-Fleet is done using the device Graphical User Interface (GUI) with a LAN or WLAN connection, while remote configuration and management is available from AC-Cloud. This user guide provides an overview of the features and functionality for both. Please note that eSIM profiles must first be configured in AC-Cloud in order to be activated on a device.

## 2. AC-Cloud

### a. Logging In

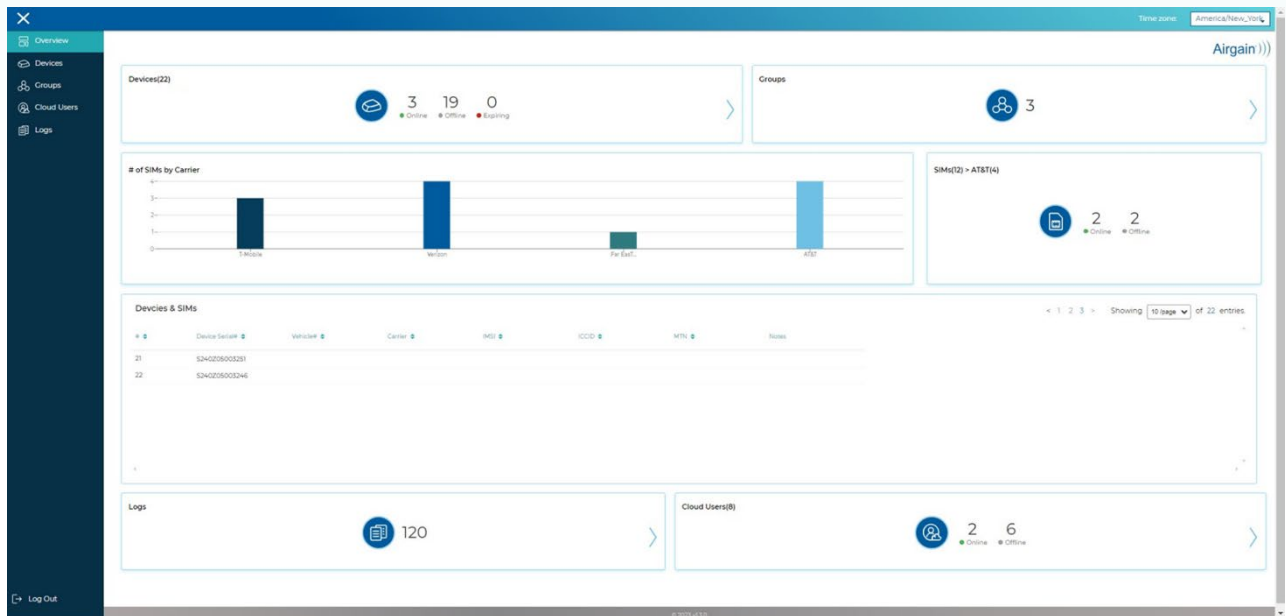


- i. Navigate to <https://ac-cloud.airgain.com/> in an internet browser.
- ii. Enter the email and password from your AC-Cloud activation email and click Log In.
  1. If your organization does not already have an AC-Cloud account, please contact [support@airgain.com](mailto:support@airgain.com) to request one be created and provide the following:
    - a. Organization name
    - b. Organization address
    - c. Admin name
    - d. Admin email address
    - e. Admin phone number
  2. If your organization already has an AC-Cloud account, please request that your admin grant you access.
- iii. Password can be changed by clicking on Forgot password?

## b. Navigation

- i. AC-Cloud is organized into the following menus and configuration options:
  - 1. Overview
  - 2. Devices
    - a. Devices
    - b. SIMs
      - i. Add/Edit eSIM profiles
    - c. Service Status
  - 3. Groups
    - a. Groups
      - i. Schedule firmware and/or config file updates
    - b. Firmware
    - c. Config Files
  - 4. Cloud Users
    - a. Manage admin and user accounts
    - b. Notifications
  - 5. Logs

## c. Overview



- i. Dashboard with summary of and access to the various AC-Cloud features.
  - 1. Only the most recently used eSIM info for each device will be displayed.

## d. Devices

| #  | Service Status | Online Status | Device Serial# | Vehicle# | Group   | Device Model | Uptime     | Firmware                | Config File | Notes |
|----|----------------|---------------|----------------|----------|---------|--------------|------------|-------------------------|-------------|-------|
| 41 | Subscribed     | Offline       | 031240501Y     |          | default | AC-Fleet     | --         | v03.01.02.0002_20240626 | --(r)       |       |
| 42 | Subscribed     | Offline       | 031240501U     |          | default | AC-Fleet     | --         | v03.01.02.0002_20240626 | --          |       |
| 43 | Subscribed     | Offline       | 031240501F     |          | default | AC-Fleet     | --         | v03.01.02.0002_20240626 | --          |       |
| 44 | Subscribed     | Online        | 031240501D     |          | default | AC-Fleet     | 12h:6m:47s | v03.01.02.0003_0828     | --          |       |
| 45 | Subscribed     | Offline       | 031240501N     |          | default | AC-Fleet     | --         | v03.01.02.0003_0805     | --          |       |
| 46 | Subscribed     | Offline       | 031240501C     |          | default | AC-Fleet     | --         | v03.01.02.0003_0805     | --          |       |
| 47 | Subscribed     | Offline       | 031240501X     |          | default | AC-Fleet     | --         | v03.01.02.0003_0805     | --          |       |
| 48 | Subscribed     | Offline       | 031240501T     |          | default | AC-Fleet     | --         | v03.01.02.0003_0805     | --          |       |
| 49 | Subscribed     | Offline       | 031240501W     |          | default | AC-Fleet     | --         | v03.01.02.0002_20240626 | --          |       |
| 50 | Subscribed     | Offline       | 031240501V     |          | default |              | --         | --                      | --(r)       |       |

- i. Browse AC-Fleet devices that are registered to the organization's AC-Cloud account.
  1. If you need to have new devices added to your account, please contact [support@airgain.com](mailto:support@airgain.com) with organization name and a copy of the invoice.
  2. Service Status
    - a. **Subscribed** indicates the device has an active AC-Cloud subscription.
    - b. **Expiring** indicates the AC-Cloud subscription for this device will expire within 30 days, please contact [support@airgain.com](mailto:support@airgain.com) to renew.
    - c. **Not subscribed** indicates the AC-Cloud subscription has expired for this device and cannot be managed remotely, please contact [support@airgain.com](mailto:support@airgain.com) to renew.
  3. Online Status
    - a. **Online** indicates the device is connected to AC-Cloud.
      - i. Not if connected with bootstrap profile.
    - b. **Offline** indicates the device is not connected to AC-Cloud.
    - c. Updates in AC-Cloud can take up to 10 minutes.
  4. **Uptime** shows how long the device has been Online.
- ii. Click on a device serial number for configuration and remote management options.

The screenshot shows the 'Edit' page for a device in the Airgain web interface. The sidebar on the left contains navigation links: Overview, Devices, SIMs, Service Status, Groups, Cloud Users, and Logs. The main content area displays the following information and controls:

- Device ID:** 46
- Status:** Subscribed
- Subscription end:** 07/21/2025
- Device serial #:** 031240501D
- Vehicle #:** (text input field)
- Group:** Default Group (dropdown menu)
- Firmware:** --
- Config:** --
- Schedule to Update:** --
- Notes about Device:** (text area)

At the top right, there is a 'Time zone' dropdown set to 'Eastern' and the 'Airgain)))' logo. Below the header, there are buttons for 'Save', 'Cancel', 'Remote Admin', 'Reset PWD', and 'Connect'.

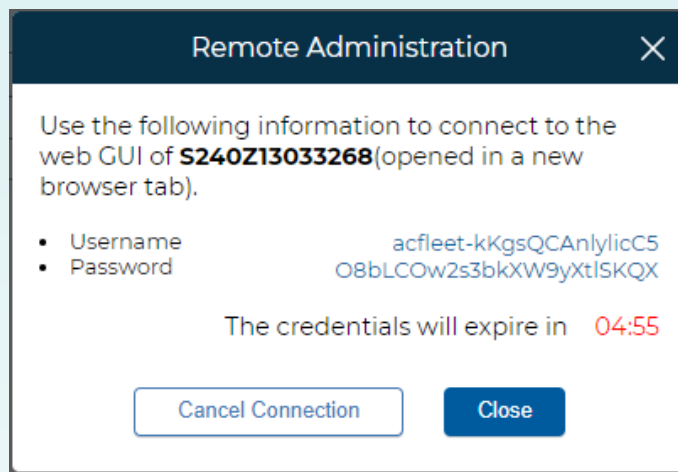
- iii. Configure Group, Vehicle # and Notes.
- iv. Reset device password or connect to devices for remote access.

The 'Remote Administration' dialog box prompts the user to choose the approach for remote administration of device **S240Z13033268**. The options are:

- ☒ SSH
- ☐ Web GUI(HTTPS)

A 'Next' button is located at the bottom right of the dialog.

- v. Remote access options are SSH and HTTPS.
  1. SSH is only for Airgain support.



**Airgain)))**

### Authorization Required

Please enter your username and password.

Username:

Password:

[Login](#) [Admin Password Reset](#)

- vii. HTTPS will automatically open a new browser window with credentials entered for logging into local GUI remotely.
  1. Click Cancel Connection to end session.
  2. Session will expire automatically with inactivity.

#### e. SIMs

| Device Serial # | eSIM Status   | eSIM Name          | Carrier  | ICCID  | APN 1              | APN 2 |
|-----------------|---------------|--------------------|----------|--------|--------------------|-------|
| 031240500A      | Activated     | preloaded_eSIM     | Verizon  | Hidden | V5GA0INTERNET      |       |
| 031240500A      | Activated     | ATT_provided_by_AG | AT&T     |        | broadband          |       |
| 031240501C      | In Use        | FirstNet           | FirstNet |        | firstnet-broadband |       |
| 031240501D      | In Use        | FirstNet           | FirstNet |        | firstnet-broadband |       |
| 031240501E      | Activated     | FirstNet           | FirstNet |        | firstnet-broadband |       |
| 031240501E      | In Use        | preloaded_eSIM     | Verizon  |        | v5ga0Internet      |       |
| 031240501E      | Downloading.. | T-Mobile           |          |        | iot-t-mobile.com   |       |
| 031240501F      | In Use        | FirstNet           | FirstNet |        | firstnet-broadband |       |
| 031240501G      | In Use        | FirstNet           | FirstNet |        | firstnet-broadband |       |
| 031240501L      | In Use        | FirstNet           | FirstNet |        | firstnet-broadband |       |

- i. Browse eSIM profiles that have been activated for each device.
  1. eSIM Status
    - a. **In Use** indicates the device is currently connected with this profile.
      - i. AC-Cloud will retain the last value reported by the device, so some profiles will show as In Use even when the device is offline.

- b. **Offline:** device is currently powered off.
  - c. **Activated** indicates this profile is available for attempting cellular connection.
    - i. Does not mean that profile connectivity has been confirmed.
  - d. **Assigning** indicates this profile has been submitted and is pending device reboot for download/activation.
  - e. **Downloading** indicates the download/activation process has started for this profile.
    - i. The entire process of downloading and activating might take around 3 minutes.
  - f. **Retry Downloading** indicates the previous download attempt failed and requires device reboot to try again.
  - g. **Fail To Download** indicates this profile has reached its limit of 3 failed download attempts and would need to be resubmitted for download/activation.
  - h. **Activating** is specific to the preloaded Verizon profile since downloading is not relevant and indicates the activation process has started.
  - i. **Fail To Activate** indicates the preloaded Verizon profile activation failed and would need to be resubmitted.
  - j. **Updating** indicates configuration changes have been made to this profile which require device reboot for implementation.
  - k. **Deleting** indicates this profile will be deleted from AC-Fleet upon next reboot.
- ii. Click on **Add** to configure a new device eSIM.
  - iii. Click on a device SN for eSIM configuration options.
    - 1. Additional eSIM profiles can be added manually.

The screenshot shows the 'SIMs > Add' interface in the Airgain portal. The left sidebar contains navigation links: Overview, Devices, SIMs, Service Status, Groups, Cloud Users, and Logs. The main content area has a 'Method' section with 'Import CSV' selected and 'Add manually' as an option. Below this is a 'Browse' button for the CSV file. To the right, a 'Data format' table is displayed, showing columns A through G: SN, EID, Activation Code, ICCID, APN 1, APN 2, and eSIM Name. The table contains four rows of sample data.

|   | A        | B        | C               | D        | E       | F     | G         |
|---|----------|----------|-----------------|----------|---------|-------|-----------|
| 1 | SN       | EID      | Activation Code | ICCID    | APN 1   | APN 2 | eSIM Name |
| 2 | 03124... | 89049... | LPA:15smdp.e... | 89148... | inte... | mms   | carrier_1 |
| 3 | 03124... | 89049... | LPA:15smdp.e... | 89148... | inte... |       | carrier_2 |
| 4 | 03124... | 89049... | LPA:15smdp.e... | 89148... | inte... |       |           |



- iv. If clicking on Add, there is an option for bulk upload using csv template.
  - 1. Click on **Template** to download the Import.csv template and then **Browse** to upload.
  - 2. Bulk upload is only for adding new eSIM profiles, not for editing existing profiles.
    - a. The default priority list will reflect the order of entries in the csv file.
  - 3. Activating preloaded Verizon profile requires entering serial number (SN), EID, “preload” for Activation Code, ICCID and APN 1.
    - a. For bulk uploads it is recommended to copy the SN, EID and Verizon (VZ) ICCID info from the device csv file that will be provided with your purchase.
    - b. Ensure the VZ ICCID has an active data plan with Verizon beforehand.
      - i. Note there is a known bug where the ICCID cannot be fixed if entered incorrectly.
    - c. A default APN of **v5ga01internet** is typically used, but please confirm with Verizon.
  - 4. Downloading and activating all other profiles requires entering SN, EID, Activation Code and APN 1.
    - a. For bulk uploads it is recommended to copy the SN and EID info from the device csv file that will be provided with your purchase.
    - b. Please ensure an eSIM profile with active data plan has been assigned to the EID and confirm with T-Mobile which APN to connect with:
      - i. If connecting with APN **fast.t-mobile.com** then the Activation Code for downloading eSIM profiles is **LPA:1\$T-MOBILE.GDSB.NET\$**
      - ii. If connecting with APN **iot.t-mobile.com** then the Activation Code for downloading eSIM profiles is **LPA:1\$T-MOBILE.IDEMIA.IO\$**
    - c. AT&T and FirstNet use the same **LPA:1\$cust-001-v4-prod-atl2.gdsb.net\$** Activation Code for all data plans, please ensure an eSIM profile with active data plan has been assigned to the EID.
      - i. A default APN of **broadband** is typically used for AT&T and **firstnet-broadband** for FirstNet, but please confirm with AT&T.
    - d. ICCID is optional as it will be pulled from the activated profile.
  - 5. APN 2 would only be entered for split/dual APN scenarios which are not yet supported.
  - 6. eSIM Name is to help with identification of the profile if desired.
- v. Manually adding new eSIMs will require first entering SN and EID, followed by the remaining required information which is the same as above for bulk upload.
  - 1. The SN, EID and VZ ICCID are also located on product label and device package label.

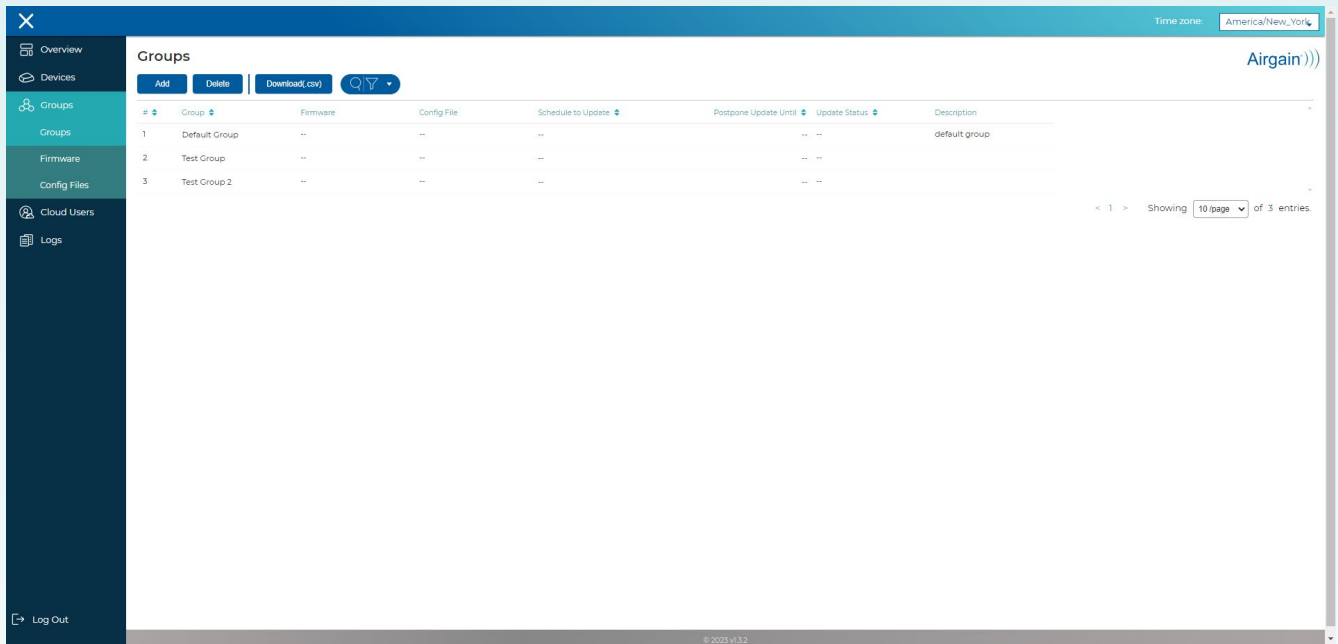
- vi. Click on the **+** button to manually add additional eSIM profiles with required information.
  - 1. Only 4 eSIM profiles are allowed at a time, including the preloaded Verizon profile.
- vii. If a profile fails download/activation it can then be updated and resubmitted.
- viii. Delete eSIM profiles if no longer needed to make space for other eSIM profiles.
  - 1. Preloaded Verizon profile cannot be deleted.
  - 2. Also not available during Assigning, Downloading or Retry Downloading.
- ix. Activated eSIM profiles allow for configuring APN(s) and desired eSIM name.
- x. Prioritize eSIM profile connectivity by dragging to desired position.
- xi. Remember to click **Save** and then reboot the device for any changes to take full effect.
  - 1. AC-Fleet will require rebooting twice for eSIM profile priority changes.

## f. Service Status

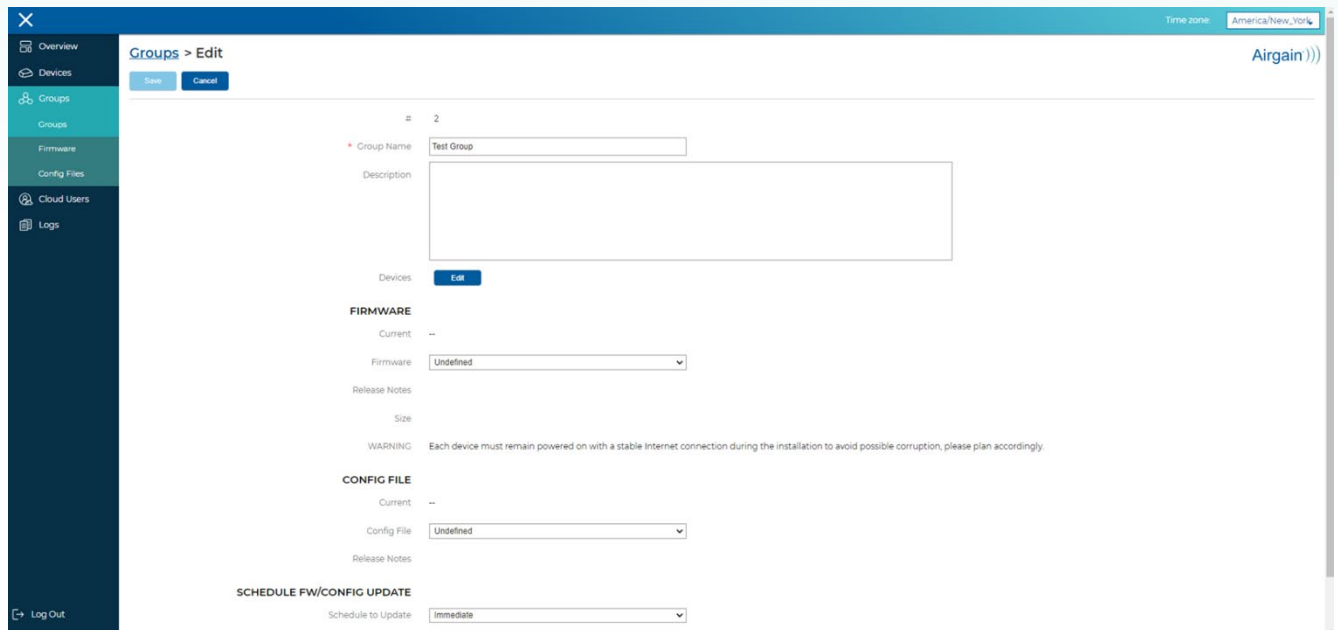
| #  | Service Status | Expiration Date | Device Serial #      | Vehicle # | Device Model | Group   |
|----|----------------|-----------------|----------------------|-----------|--------------|---------|
| 31 | In Warranty    | 04/26/2025      | S240Z13033259        | -         | -            | default |
| 32 | In Warranty    | 07/02/2025      | 03240000000000000000 | -         | -            | default |
| 33 | In Warranty    | 04/25/2025      | S240Z13033259        | -         | -            | default |
| 34 | In Warranty    | 04/26/2025      | S240Z13033259        | -         | -            | default |
| 35 | In Warranty    | 07/02/2025      | 03240000000000000000 | -         | -            | default |
| 36 | In Warranty    | 04/25/2025      | S240Z13033259        | -         | -            | default |
| 37 | In Warranty    | 07/02/2025      | 03240000000000000000 | -         | -            | default |
| 38 | In Warranty    | 07/02/2025      | 03240000000000000000 | -         | -            | default |
| 39 | In Warranty    | 07/02/2025      | 03240000000000000000 | -         | -            | default |
| 40 | In Warranty    | 07/02/2025      | 03240000000000000000 | -         | -            | default |

- i. Browse AC-Fleet devices for subscription status and expiration date.

## g. Groups



- i. Browse and manage Groups of AC-Fleet devices.
- ii. Click on a Group for configuration options.



- iii. Modify Group Name and Description.
- iv. Select and schedule firmware and configuration file updates.

×

Edit Devices of Test Group

Edit Devices of Test Group:

☒

#

Device Serial #

Vehicle #

☒

1

S240Z05003214

←

→

Devices in Default Group:

☐

#

Device Serial #

Vehicle #

☐

1

S240Z05003246

☐

2

S240Z05003249

☐

3

S240Z05003252

☐

4

S240Z05003263

☐

5

S240Z05003276

☐

6

S240Z05003277

☐

7

S240Z13033262

☐

8

S240Z13033263

☐

9

S240Z13033267

☐

10

S240Z13033269

☐

11

S240Z13033270

☐

12

S240Z13033269

Cancel

Save

v. Move devices between Default Group.

## h. Firmware

×

Overview

Devices

Groups

Groups

Firmware

Config Files

Cloud Users

Logs

Log Out

Firmware

Search release notes

#

Firmware

Release Date

Size

Release Notes

1

v03.01.02.0002

06/04/2024 01:20:27

57.50 MB

b5 FW

2

v03.01.02.0002

06/04/2024 01:55:35

57.50 MB

b5 FW dummy

3

v03.01.02.0002d

06/04/2024 04:45:10

57.50 MB

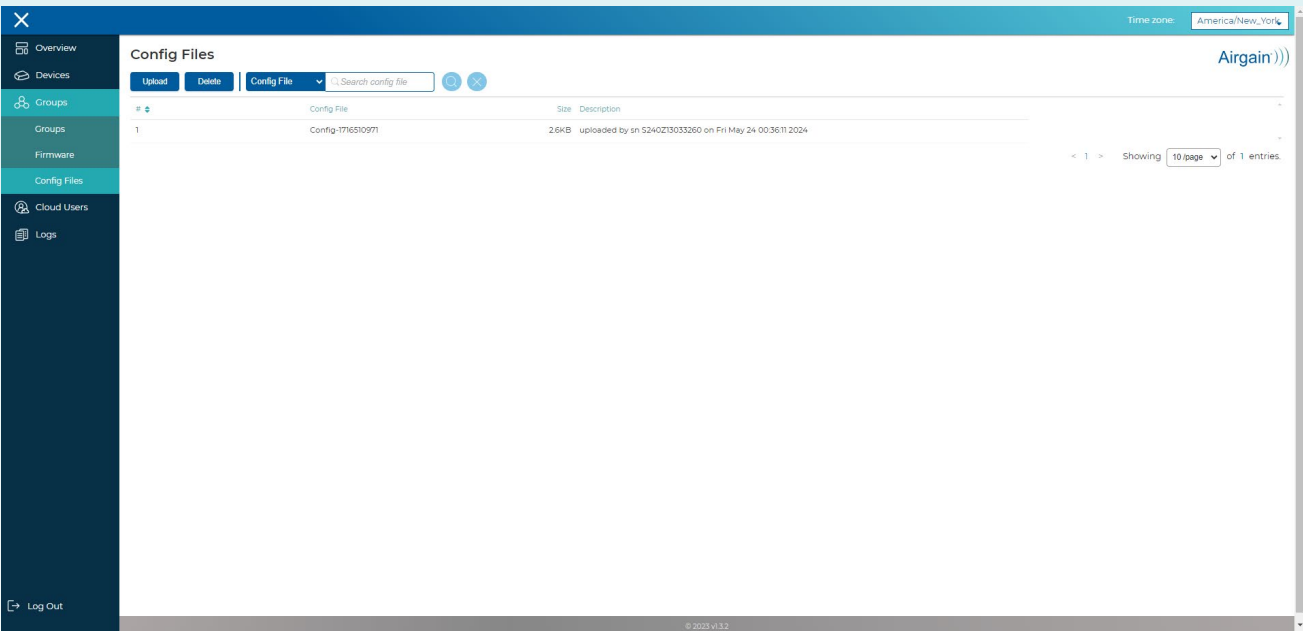
b5 FW dummy

< 1 >

Showing 10 page of 3 entries

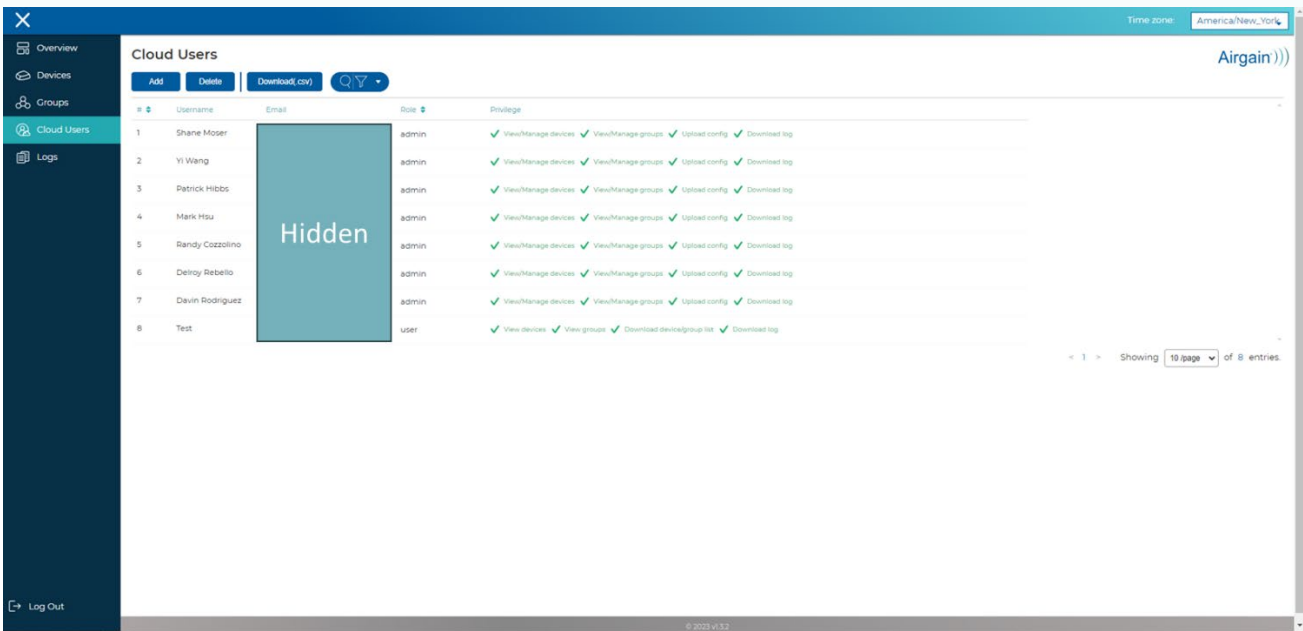
i. Browse available AC-Fleet firmware with links to release notes on <https://www.airgain.com/>.

i. Config Files



- i. Browse and upload AC-Fleet configuration files.

j. Cloud Users



- i. Browse and manage AC-Cloud admin and user accounts.
- ii. Click on a username for configuration options.

**Cloud Users > Edit**

Username: Shane Moser

Email: Hidden

Password: Change PWD

**ROLE & PRIVILEGE**

Role: user

Privileges:

- View and manage devices
- Download device list(csv)
- Manage devices: create, edit, delete
- Do remote administration: CUI, SSH

Role: admin

Privileges:

- View and manage devices
- Download device list(csv)
- Manage devices: create, edit, delete
- Do remote administration: CUI, SSH

**NOTIFICATION**

Send email when

- ☐ service will expire
- ☐ new firmware available
- ☐ FOTA set for a group
- ☐ devices added to/removed from the cloud
- ☐ config file uploaded

Device status

- ☐ low vehicle battery (occurs/clears)
- ☐ thermal protection mode (on/off)
- ☐ device admin password changed
- ☐ device reset to default

- iii. Modify Username, Email and Password.
- iv. Select admin or user privileges.
  1. User role can only update their own password.
- v. Configure email notification settings.

## k. Logs

**Logs**

Download CSV

| #  | DateTime            | Cloud User | IP Address | Action |
|----|---------------------|------------|------------|--------|
| 11 | 06/06/2024 14:57:10 |            |            |        |
| 12 | 06/06/2024 18:29:42 |            |            |        |
| 13 | 06/06/2024 18:31:51 |            |            |        |
| 14 | 06/10/2024 18:58:44 |            |            |        |
| 15 | 06/10/2024 19:17:29 |            |            |        |
| 16 | 06/10/2024 19:17:56 |            |            |        |
| 17 | 06/10/2024 19:22:03 |            |            |        |
| 18 | 06/10/2024 19:41:03 |            |            |        |
| 19 | 06/10/2024 19:43:49 |            |            |        |
| 20 | 06/10/2024 19:52:35 |            |            |        |



Showing 10 page of 137 entries

- i. Browse available AC-Cloud event logs.

### 3. Local GUI

#### a. Logging In

##### Product Label

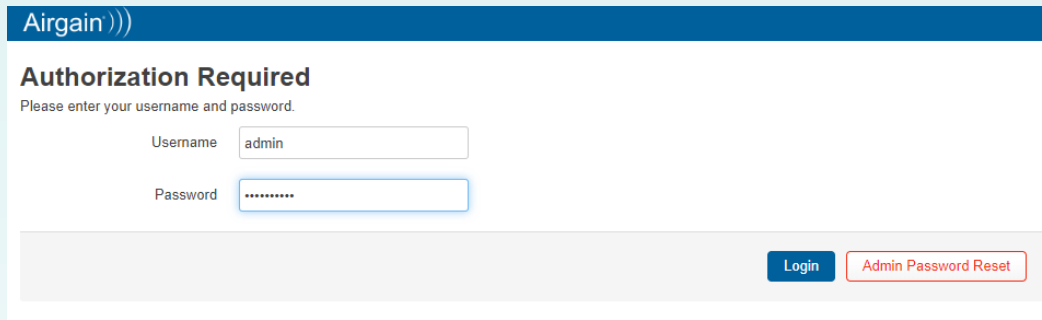
|   |  |
|---|--|
| <p><a href="http://www.airgain.com">www.airgain.com</a><br/>AirgainConnect® Fleet™<br/>Model Name: CY-AF5G-B-NAT<br/>Input: 12-24V  2A<br/>IP67 &amp; IP69K<br/>FCC ID: 2AVNXCYAF5G<br/>IC: 25852-CYAF5G<br/>Contains FCC ID: RI7FN990A28<br/>Contains IC: 5131A-FN990A28<br/>This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.<br/>MADE IN TAIWAN</p> | <p>SN: 031YYMMDDD<br/><br/>IMEI: XXXXXXXXXXXXXXXX<br/>EID: XXXXXXXXXXXXXXXX<br/>XXXXXXXXXXXXXXXXXXXX<br/>VZ ICCID: XXXXXXXXXXXXXXXXXXXX<br/>LAN MAC: XXXXXXXXXXXX<br/>WiFi MAC: XXXXXXXXXXXX<br/>IP Address: 192.168.1.1<br/>ID: admin/XXXXXXXXXX<br/>2.4G SSID: acfleet_XXXXXX<br/>Password: XXXXXXXXXXXXXXXX<br/>5G SSID: acfleet_XXXXXX_5G<br/>Password: XXXXXXXXXXXXXXXX</p> |
|---|--|

##### Device Package Label



- i. Refer to the product label attached to the Ethernet cable or device package label for relevant information.
  1. IP address for accessing local GUI is **192.168.1.1**.
  2. Username is admin.
  3. Default admin password is listed after admin/ (fmbct7tkf7 in example device package label above).
  4. SSID and corresponding password for 2.4G and 5G Wi-Fi are on consecutive lines.

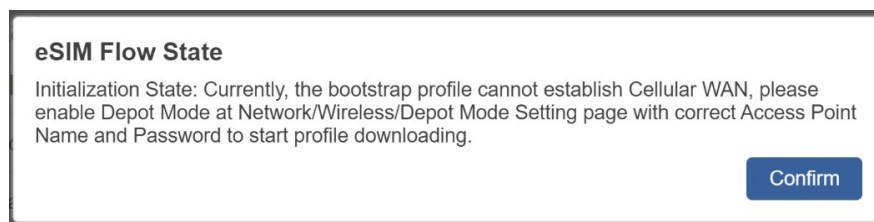
- ii. Establish a LAN or WLAN connection after booting up the device.
  1. LAN connection is available through ethernet cable exiting the device.
  2. WLAN connection is available over 2.4G or 5G Wi-Fi.



- iii. Enter the IP address into an internet browser to access the local GUI and log in.
  1. Username is set to admin by default.
  2. Enter the default admin password and press Login.
  3. Admin Password Reset is for resetting to default admin password.

## b. Syncing with AC-Cloud

- i. AC-Fleet will automatically sync with AC-Cloud after booting up as long as the device is added to the customer organization account and has an active subscription.
  1. If booting up for the first time, AC-Fleet will need to download/activate an eSIM profile using the preloaded bootstrap profile or by connecting to Wi-Fi through Depot Mode.
    - a. Depot Mode can only be enabled if the bootstrap profile fails to establish a connection as indicated by below pop-up notification.
      - i. OTA firmware updates can also be performed if connected to W-Fi.



- b. Please allow up to 10 minutes for this initial syncing process to complete.
    - c. The bootstrap profile will go dormant once an eSIM profile is connected.
    - d. Downloaded/activated eSIM profiles will be visible in Network > Cellular Settings.
  - ii. If updates are made to a device's eSIM configuration in AC-Cloud, a reboot will be required for them to take effect.
    1. The device will continue cycling through all available eSIM profiles in order of priority until cellular connectivity is confirmed.



## c. Navigation

- i. The local GUI is organized into the following menus and configuration options:
  1. Status
    - a. Overview
      - i. GPS Log
      - ii. System Log
      - iii. Modem Log (visible in Advanced Mode)
  2. System
    - a. System Properties
      - i. General Settings
        1. Local Time
        2. Timezone
        3. Hostname
      - ii. Logging
        1. External system log server
      - iii. Time Synchronization
        1. NTP/GPS
      - iv. Power Management
        1. Minimum Battery Voltage
        2. Ignition Off Timer
    - b. Administration
      - i. Router Password
      - ii. User Account
      - iii. Advanced Mode
    - c. Backup / Flash Firmware
      - i. Backup
      - ii. Restore
      - iii. Flash new firmware
    - d. Reboot
  3. Network
    - a. IP Interfaces
    - b. Wireless
      - i. SSID
        1. General Setup
        2. Wireless Security
        3. MAC-Filter
      - ii. Depot Mode Setting

- c. Routing (visible in Advanced Mode)
  - i. Static IPv4 Route
  - ii. Static IPv6 Route
  - iii. IPv4 Policy Route
  - iv. IPv6 Policy Route
- d. GPS
  - i. Remote Server
  - ii. Sentence Type
- e. Diagnostics
  - i. Speedtest
  - ii. Modem (visible in Advanced Mode)
- f. Cellular Settings
- g. Firewall (visible in Advanced Mode)
  - i. General Settings
    - 1. Enable SYN-flood protection
    - 2. Drop invalid packets
    - 3. Zones
  - ii. Port Forwards
  - iii. Traffic Rules
- h. eSIM Setup Flow
  - i. AC-Cloud Subscription
  - ii. Ping Test After Activation/Device Reboot
  - iii. Profile Switching Conditions
- i. eSIM Profile Manage (visible in Advanced Mode)
- j. QoS (visible in Advanced Mode)
  - i. Classification Rules

## d. Status

### i. Overview

| Airgain))) Status ▾ System ▾ Network ▾ Logout |  |
|---|--|
| Cellular Status                               |  |
| Profile                                       | eSIM Profile 2   |
| Status  | Active   |
| IMSI  | Hidden   |
| ICCID   | Hidden   |
| EID   | Hidden   |
| IMEI  | Hidden   |
| Network Mode                                  | AT&T   |
| Country/Region                                | United States of America   |
| Network                                       | 5G NSA   |
| Band  | LTE Band 14 (700/800 MHz)<br>RSSI: -81 dBm<br>SINR: 9 dB<br>RSRP: -110 dBm<br>RSRQ: -11 dB |
| Secondary Band(SCC1)                          | N/A  |
| Secondary Band(SCC2)                          | N/A  |
| System  |  |
| Hostname                                      | ACfleet-S240Z13033268  |
| Model   | AC-Fleet   |
| Firmware Version                              | v13.01.02.0005   |
| Local Time                                    | 2024-09-23 20:42:05  |
| GPS Log (Last 7 days)                         | <a href="#">Download</a>   |
| System Log (Last 7 days)                      | <a href="#">Download</a>   |

### ii. Cellular Status


1. Profile will indicate the current eSIM profile, with more details in Cellular Settings.
2. Status will indicate current eSIM profile connectivity with corresponding details underneath.
  - a. **Active** indicates the specified eSIM profile is in use.
  - b. **Loading** indicates the device is in the process of switching to a new eSIM profile.
  - c. **Inactive** indicates the device failed to establish a cellular connection.

### iii. System

1. Relevant device information and options for downloading GPS and System Logs.

**Port status**

eth0


1 GbE

▲ 94.5 MIB  
▼ 58.8 MIB

**Network**

| IPv4 Upstream   | IPv6 Upstream  |
|---|--|
| Address: 10.230.250.40/28<br>Gateway: 10.230.250.41<br>DNS 1: 172.26.38.1<br>DNS 2: 172.26.38.1<br>Connected: 0h 37m 5s<br>WAN Device: Cellular | Prefix Delegated: 2600:380:9422:768c::/64<br>Address: 2600:380:9422:768c:8576:9d4f:d9e:4cb8/128<br>Gateway: 2600:380:9422:768c:14b3:bff3:12f3:8b35<br>DNS 1: fc00:a::300<br>DNS 2: fc00:a::300<br>Connected: 0h 37m 5s<br>WAN Device: Cellular |

**DHCP**

**DHCP Clients**

| Hostname     | IPv4 address  | MAC address       | Lease time remaining |
|--------------|---------------|-------------------|----------------------|
| AG-US01-LT04 | 192.168.1.217 | 88:A4:C2:CC:FE:7B | 10h 51m 30s          |

**DHCPv6 Clients**

| Host         | IPv6 address  | DUID                         | Lease time remaining |
|--------------|---|------------------------------|----------------------|
| AG-US01-LT04 | 2600:380:9422:768c::647/128 fd46:4cf9:613d::647/128 | 0001000129e10ec388a4c2ccfe7b | 10h 51m 19s          |

**Wireless**

| 2.4GHz radio   | 5GHz radio  |
|--|---|
| Status: <span style="color: green;">Active</span><br>SSID: acfleet_03247 | Status: <span style="color: green;">Active</span><br>SSID: acfleet_03247_5G |

**Associated Stations**

| Network | MAC address | Host | Signal |
|---------|-------------|------|--------|
|---------|-------------|------|--------|

- iv. Port status
  1. Relevant LAN information, hover mouse over bottom of box for additional data.
- v. Network
  1. Internet Protocol (IP) address info for IPv4 and IPv6.
  2. WAN Device will indicate if connected over Cellular or WLAN if in Depot Mode.
- vi. Dynamic Host Configuration Protocol (DHCP)
  1. Relevant information for device clients.
- vii. Wireless
  1. Active status indicates AC-Fleet is broadcasting as an Access Point.

**Wireless**

| 2.4GHz radio   | 5GHz radio  |
|--|---|
| Status: <span style="color: red;">Inactive</span><br>SSID: acfleet_03247 | Status: <span style="color: red;">Inactive</span><br>SSID: acfleet_03247_5G |

2. Inactive status indicates AC-Fleet is behaving as a client in Depot Mode.
- viii. Associated Stations
  1. Relevant information for active clients.

## e. System

### i. System Properties

The screenshot shows the 'System Properties' page with the 'General Settings' tab selected. The page title is 'System' with a subtitle 'Here you can configure the basic aspects of your device like its hostname or the timezone.' Below the title are four tabs: 'General Settings' (active), 'Logging', 'Time Synchronization', and 'Power Management'. The 'General Settings' section contains three fields: 'Local Time' with a value of '2024-07-13 23:15:18' and two buttons 'Sync with NTP-Server' and 'Sync with GPS'; 'Timezone' with a dropdown menu set to 'UTC'; and 'Hostname' with a text field containing 'ACfleet-S240Z13033268'. A 'Save & Apply' button is located at the bottom right.

#### 1. General Settings

- a. Select Timezone to configure Local Time.
  - i. Click Sync with NTP-Server or Sync with GPS to manually sync UTC time.
- b. Option for configuring Hostname.

The screenshot shows the 'System Properties' page with the 'Logging' tab selected. The page title is 'System' with a subtitle 'Here you can configure the basic aspects of your device like its hostname or the timezone.' Below the title are four tabs: 'General Settings', 'Logging' (active), 'Time Synchronization', and 'Power Management'. The 'Logging' section contains three fields: 'External system log server' with a value of '0.0.0.0' and two informational icons; 'External system log server port' with a value of '514'; and 'External system log server protocol' with a dropdown menu showing 'UDP', 'UDP' (selected), and 'TCP'. A 'Save & Apply' button is located at the bottom right.

#### 2. Logging

- a. Automatically export system logs to an external server when updated.

**Airgain**))) Status System Network Logout

## System

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

### System Properties

General Settings Logging Time Synchronization Power Management

Time Sync

NTP server candidates

- 
- 
- 
- 
- 

### 3. Time Synchronization

- Configure automatic UTC time synchronization to NTP or GPS.

**Airgain**))) Status System Network Logout

## System

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

### System Properties

General Settings Logging Time Synchronization Power Management

Minimum Battery Voltage

☐ Range: 9V~26V

☐ If the battery voltage suddenly fails below the threshold, any data log (include GNSS data) that has not been stored to flash will not be saved before entering standby.

Ignition Off Timer

☐ Range: 30(s)~14400(s)

☐ The device will continue to serve for several seconds after the vehicle is turned off. The duration of service is determined by the setting value here.

### 4. Power Management

- Define Minimum Battery Voltage before AC-Fleet enters standby mode to avoid draining low vehicle battery.
- Configure Ignition Off Timer for how long after vehicle is turned off before AC-Fleet enters standby mode.

## ii. Administration

**Airgain**))) Status System Network Logout

Router Password User Account Advanced Mode

### Router Password

Changes the administrator password for accessing the device

Password

Confirmation

1. Router Password
  - a. Customize the admin password for accessing local GUI.

The screenshot shows the 'User Login Permission' configuration page in the Airgain web interface. The top navigation bar includes 'Airgain)))', 'Status', 'System', 'Network', and 'Logout'. Below the navigation bar, there are three tabs: 'Router Password', 'User Account', and 'Advanced Mode'. The 'User Account' tab is selected. The main heading is 'User Login Permission' with a subtitle 'Login permission for user account'. There is an 'Enable' checkbox which is currently unchecked. Below it, a link with a question mark icon says 'Enable user account'. There are three input fields: 'Account' with the value 'user', 'Password' with a masked password and a '\*' icon, and 'Confirmation' with a masked password and a '\*' icon. At the bottom right, there is a 'Save & Apply' button.

2. User Account
  - a. Configure a user account which only has access to Status Overview and Reboot.

The screenshot shows the 'Advanced Mode' configuration page in the Airgain web interface. The top navigation bar includes 'Airgain)))', 'Status', 'System', 'Network', and 'Logout'. Below the navigation bar, there are three tabs: 'Router Password', 'User Account', and 'Advanced Mode'. The 'Advanced Mode' tab is selected. The main heading is 'Advanced Mode' with a subtitle 'Switch to advanced Mode'. There is an 'Enable Advanced Mode' checkbox which is currently unchecked. Below it, a link with a question mark icon says 'Advanced Mode will provide more device information and setting to configure'. At the bottom right, there is a 'Save & Apply' button.

3. Advanced Mode
  - a. For accessing the following advanced gateway settings:
    - i. Modem information and logs
    - ii. Routing
    - iii. Firewall
    - iv. eSIM Profile Manage
    - v. Quality of Service

**Firmware / Configuration**

**Backup**  
Click "Download" to download current configuration files.

Download backup [Download](#)

Download backup to cloud [Backup to cloud](#)

**Restore**  
To restore configuration files, you can upload a previously generated backup config here. To reset the firmware to its initial state, click "Reset to default".

Reset to defaults [Reset to default](#)  
\*\*\*WARNING: This option will delete and reset all settings in AC-Fleet to default values (Except for downloaded eSIM profiles).

Restore backup [Upload config](#)

**Flash new firmware image**  
Upload image here to replace the running firmware.  
Latest version : **v03.01.02.0002d**  
if the cloud subscription is not active, the latest will not be display.

[Open Change Note](#)

Current version : **v03.01.02.0002\_20240626**

Upgrade to latest version [Upgrade Now](#)

Upgrade Firmware from file [Select image](#)

### iii. Backup / Flash Firmware

1. Backup
  - a. Download config files locally or to AC-Cloud.
2. Restore
  - a. Upload config files or reset device to default settings.
    - i. Reset to defaults will activate the bootstrap profile for the initial sync with AC-Cloud.
    - ii. Reset to defaults will not delete existing eSIM profiles, they can only be deleted from the device using AC-Cloud.
3. Flash new firmware image
  - a. **Upgrade Now** button will install the latest version from AC-Cloud.
    - i. Note there is a known bug where this option might be missing, please enable Advanced Mode for it to be visible.
  - b. **Select image** button is for uploading desired firmware locally.

**Reboot**  
Reboots the operating system of your device

[Perform reboot](#)

### iv. Reboot

1. Reboot the device.



## f. Network

The screenshot shows the 'Airgain' network management interface. At the top is a navigation bar with 'Status', 'System', 'Network', and 'Logout' links. Below this is the 'IP Interfaces' section. It contains two interface cards: 'lan' (green header) and 'wwan0' (red header). The 'lan' card shows details for the 'br-lan' interface, including its protocol (Static address), MAC address (B8:4C:87:92:04:02), IPv4 address (192.168.1.1/24), IPv6 address (2600:380:5876:67f1::1/64), and IPv6 ULA-Prefix (fd46:4cf9:613d::1/60). An 'Edit' button is visible to the right of the 'lan' card. The 'wwan0' card shows its protocol as Cellular.

### i. IP Interfaces

1. Relevant IP interface information and option for editing settings.

This screenshot shows the 'General Settings' tab for the 'lan' interface. The 'Status' section displays the device name 'br-lan', MAC address 'B8:4C:87:92:04:02', IPv4 address '192.168.1.1/24', IPv6 address '2600:380:5876:67f1::1/64', and IPv6 ULA-Prefix 'fd46:4cf9:613d::1/60'. Below this, there are input fields for 'IPv4 address' (192.168.1.1), 'IPv4 netmask' (255.255.255.0), 'IPv6 ULA-Prefix' (fd46:4cf9:613d::/48), and 'MTU' (1500). At the bottom right are 'Dismiss' and 'Save & Apply' buttons.

### 2. General Settings

- a. Edit general settings.

This screenshot shows the 'DHCP Server' tab for the 'lan' interface. It contains settings for the DHCPv4 pool: 'Start' (100), 'Limit' (150), and 'Lease time' (12h). Each setting has a help icon and a descriptive note. For example, the 'Start' note says 'Starting address of the DHCPv4 pool. Please make sure lan IPv4 address not inside of pool range.' At the bottom right are 'Dismiss' and 'Save & Apply' buttons.

### 3. DHCP Server

- a. Edit DHCP server settings.

ii. Wireless

Airgain))) Status System Network Logout

SSID Depot Mode Setting

### Wireless Overview

|         |  |      |
|---------|--|------|
| 2.4GHz  | Generic MAC80211 802.11b/g/n/ax<br>Channel: 6 (2.437 GHz)  |      |
|         | SSID: acfleet_03247  | Edit |
| 5GHz    | Generic MAC80211 802.11n/ac/ax<br>Channel: 149 (5.745 GHz) |      |
|         | SSID: acfleet_03247_5G                                     | Edit |
| unknown | Multiple BSSID   | Add  |

1. SSID

- a. Configure existing SSID settings or additional SSID options.

Wireless Network: "acfleet\_03247"

### Device Configuration

General Setup

Status: SSID: acfleet\_03247

Wireless network is enabled Disable

The button is NOT working when Depot Mode is enabled.

Operating frequency: Mode: AX Band: 2.4 GHz Channel: auto Width: 40 MHz

### Interface Configuration

General Setup Wireless Security MAC-Filter

Mode: Access Point

ESSID: acfleet\_03247

Dismiss Save & Apply

b. General Setup

- i. Customize SSID and operating frequency.

Wireless Network: "acfleet\_03247"

### Device Configuration

**General Setup**

Status:

Wireless network is enabled Disable

The button is NOT working when Depot Mode is enabled.

Operating frequency: Mode  Band  Channel  Width

### Interface Configuration

**General Setup** **Wireless Security** **MAC-Filter**

Encryption:

Cipher:

Key:

Dismiss Save & Apply

c. Wireless Security

- i. Customize SSID password and security settings.

Wireless Network: "acfleet\_03247"

### Device Configuration

**General Setup**

Status:

Wireless network is enabled Disable

The button is NOT working when Depot Mode is enabled.

Operating frequency: Mode  Band  Channel  Width

### Interface Configuration

**General Setup** **Wireless Security** **MAC-Filter**

MAC Address Filter:

Dismiss Save & Apply

d. MAC-Filter

- i. Configure MAC Address filtering.

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SSID
Depot Mode Setting

## Depot Mode Setting

Depot mode allows users to set a specific access point name for connection. Once this feature is enabled, the Wi-Fi mode will be set to station mode and try to connect when the specific access point is found. The cellular service will be disabled after the connection is successful.

Enable ☐

When this field enable, Wireless service will search and connect to a specific access point. Please enter the access point name, authentication method, and password below

Access Point Name

Authentication Method

WPA2-PSK (strong security)  
WPA2-EAP (strong security)  
WPA3-EAP (strong security)  
WPA2-EAP/WPA3-EAP Mixed Mode (strong security)  
WPA3-SAE (strong security)  
WPA2-PSK/WPA3-SAE Mixed Mode (strong security)  
No Encryption (open network)

Password

Timeout for WiFi Disconnected

The minimum value is 60(s).  
The network service will switch to Cellular connection after the WiFi client is disconnected for a few seconds. The number of seconds will be determined by the value in this field.

Depot AP Scan Speed

Scan interval: 2:00

Default  
Rapid  
Slow

The value is calculated based on the Speed of channel scan.  
Channel Scan: This action will continuously scan for the SSID names provided by the "Access Point Name", including both 2.4GHz and 5GHz frequencies.

Save & Apply

## 2. Depot Mode Setting

- a. Enable Depot Mode for AC-Fleet to automatically connect to a desired Wi-Fi Access Point (AP) once in range and disconnect once out of range.
  - i. AC-Fleet will temporarily lose WAN connectivity as it switches between cellular and Depot Mode.
  - ii. SSID from AC-Fleet will be disabled while in Depot Mode, except during initial syncing process.
    1. Wi-Fi clients will need to switch to the Depot Mode AP.
  - iii. Note that AC-Fleet cannot connect to a hidden AP.
- b. Configure the amount of time after losing connection to Depot Mode AP before switching to cellular network.
- c. Select how frequent AC-Fleet will scan for the Depot Mode AP.
  - i. Default interval is every 2 minutes.
  - ii. Rapid interval is every 1 minute.
  - iii. Slow interval is every 3 minutes.

Airgain))) Status System Network Logout

## Routing

Routing defines over which interface and gateway a certain host or network can be reached.

Static IPv4 Route Static IPv6 Route IPv4 Policy Route IPv6 Policy Route

### Static IPv4 Route

| Interface                           | Target | Gateway | Disable |
|-------------------------------------|--------|---------|---------|
| This section contains no values yet |        |         |         |

Add

Save & Apply

- iii. Routing (visible in Advanced Mode)
  1. Define IPv4 and IPv6 routing options.

### Routing

General Settings

Interface: unspecified

Target: 0.0.0.0/0

Gateway: 192.168.0.1

Dismiss Save & Apply

2. Add a static route.

### Routing

General Settings

Incoming interface: unspecified

Source: 0.0.0.0/0

Outgoing interface: unspecified

Destination: 0.0.0.0/0

Dismiss Save & Apply

3. Add a policy route.

Airgain ))) Status System Network Logout

## GPS Forwarding

### Remote Server

Enable : ☐

Host Name/IP:  +

Protocol: UDP TCP UDP

Report interval (s):

GPS Report Format: NMEA NMEA custom Track Star NMEA

### Sentence Type

Configuration of the GNSS Sentence Type

NMEA: GGA+VTG GGA+VTG GGA+VTG+RMC GGA+VTG+RMC+GSA+GSV

[Save & Apply](#)

#### iv. GPS

1. Stream GPS data to external platforms that support NMEA.
  - a. Host Name/IP for destination server is in the format IP Address:Port.
  - b. NMEA requires a static IP address to identify the device.
  - c. [Track Star](#) supports a custom AC-Fleet NMEA without need for static IP address.

Airgain ))) Status System Network Logout

[Diagnostics](#) [Speedtest](#)

## Diagnostics

Execution of various network commands to check the connection and name resolution to other systems.

IPv4 Ping IPv4 Traceroute Nslookup

IPv4 Ping IPv6 Ping

#### v. Diagnostics

1. Confirm connectivity of AC-Fleet.

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## Speedtest

Speedtest allows user to check network ability.

### General Settings

Click "Start/Stop" to activate Speedtest or to stop Speedtest.

Speedtest time interval (2-60 minutes):

Start Speedtest action

Stop Speedtest action

### History

Users can check the previous test results as follows. Up to 20 records will be kept at most. When the number of records exceeds 20, deletion will start from the oldest record, shutdown will clear the records. Please refer to the system log for the entire Speedtest results.

| DATE/TIME        | PING(ms) | Download rate(Mbps) | Upload rate(Mbps) | Location/Server                       | Service Provider | GPS record                 | Band  |
|------------------|----------|---------------------|-------------------|---------------------------------------|------------------|----------------------------|---|
| 2024/07/10 18:01 | 84.207   | 59.50               | 16.24             | Rochester, NY/University of Rochester | AT&T Wireless    | 2707.543436N/08010.369276W | 5G Band n5 (850 MHz)<br>RSSI:-79 dBm<br>SINR:11.5 dB<br>RSRP:-91 dBm<br>RSRQ:-11 dB |

## 2. Speedtest

- Automatically collects performance and location data at desired intervals.
  - Limited to 20 entries in local GUI.

### Speed test start.

Speedtest DATE/TIME:2024/07/10 21:41,PING:79.047,

Speedtest DATE/TIME:2024/07/10 21:43,PING:68.621,

Speed test end.

- Search for Speedtest in system log to see full results.

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Modem

## Modem

|                  |  |
|------------------|--|
| Model            | FN990A28   |
| Firmware Version | A0R.000033-9023  |
| Modem Log        | <input type="button" value="Capture"/> <input type="button" value="Download"/> |

## 3. Modem (visible in Advanced Mode)

- Modem information as well as options for capturing and downloading Modem Logs.

The screenshot displays the 'Cellular Settings' page in the Airgain web interface. At the top, there's a navigation bar with 'Airgain)))', 'Status', 'System', 'Network', and 'Logout'. The main section is titled 'Cellular Settings'. It includes several configuration options: 'IP Passthrough' (checkbox), 'Reply to ICMP Ping' (checkbox), 'DNS Servers' (dropdown set to 'Dynamic'), 'MTU(Maximum Transmission Unit)' (text input set to '1500'), and a 'DNS Servers' section with 'Static' dropdown and 'IPv4 Primary DNS Server' and 'IPv4 Secondary DNS Server' text inputs. Below these are tabs for 'eSIM Profile 1' and 'eSIM Profile 2'. The 'eSIM Profile 1' tab is active, showing fields for 'Priority' (1), 'ICCID' (89148000010397431271), 'Carrier' (Verizon), 'Name' (preloaded\_eSIM), 'Authentication' (NONE), 'Cellular Operation' (Auto(LTE/NR5G-NSA/NR5G-S)), 'APN Operator Setting' (Custom), 'Data Roaming' (checkbox), 'APN' (V5GA01INTERNET), 'SIM PIN', and 'Confirm PIN'. A 'Save & Apply' button is at the bottom right.

## vi. Cellular Settings

1. Certain settings are universal and will be applied for all cellular connectivity.
  - a. **IP Passthrough** can be enabled for assigning to the first IP-requesting host.
  - b. **Reply to Internet Control Message Protocol (ICMP) Ping** can be enabled for reporting errors and performing network diagnostics.
  - c. **Domain Name System (DNS) Servers** is set to Dynamic by default to keep the domain name associated with an ever-changing IP address.
    - i. Change to Static if using a static IP address and enter DNS server(s).
  - d. **Maximum Transmission Unit (MTU)** size of WAN interface is fixed at 1500 bytes.
2. Each downloaded/activated eSIM profile will have its own tab and settings.
  - a. **Priority, Name** and **APN** can only be updated from syncing with AC-Cloud.
  - b. **ICCID, Carrier** and **APN Operator Setting** are fixed.
  - c. **Authentication** can be enabled for extra security.
  - d. **Cellular Operation** is set to Auto by default with options for 5G only and LTE only.
  - e. **Data Roaming** can be enabled for roaming to other network operators.
  - f. **SIM PIN** can be entered if needed.



3. After rebooting the device, changes cannot be made to cellular settings until after the syncing process with AC-Cloud is completed.
  - a. If changes are needed in order to establish a cellular connection, then try enabling Depot Mode to complete the syncing process.

vii. Firewall (visible in Advanced Mode)

**Firewall - Zone Settings**  
The firewall creates zones over your network interfaces to control network traffic flow.

**General Settings**

Enable SYN-flood protection ☒  
 ⓘ Enable this option to defend against SYN flood denial-of-service attacks

Drop invalid packets ☐

Input: reject  
 Output: accept  
 Forward: reject

**Zones**

| Zone ⇒ Forwardings | Input  | Output | Forward |
|--------------------|--------|--------|---------|
| ipp ⇒ wan          | ACCEPT | ACCEPT | ACCEPT  |
| lan ⇒ wan          | ACCEPT | ACCEPT | ACCEPT  |
| wan ⇒ REJECT       | REJECT | ACCEPT | REJECT  |

Save & Apply

1. General Settings
  - a. Enable protection from SYN flood denial-of-service attacks.
  - b. Configure invalid packet drop parameters.
  - c. Define Zones.

**Firewall - Port Forwards**  
Port forwarding allows remote computers on the Internet to connect to a specific computer or service within the private LAN.

**Port Forwards**

| Name                                | Match | Action | Enable |
|-------------------------------------|-------|--------|--------|
| This section contains no values yet |       |        |        |

Add

Save & Apply

2. Port Forwards
  - a. Configure port forwarding.

**Firewall - Port Forwards - Unnamed forward**

General Settings

Name: Unnamed forward

Protocol: TCP UDP

External port:

Internal IP address: any

Internal port: any

Match incoming traffic directed at the given destination port or port range on this host

Redirect matched incoming traffic to the specified internal host

Redirect matched incoming traffic to the given port on the internal host

Dismiss Save & Apply

b. Add/Edit port forwarding.

**Airgain** Status System Network Logout

General Settings Port Forwards Traffic Rules

**Firewall - Traffic Rules**

Traffic rules define policies for packets traveling between different zones, for example to reject traffic between certain hosts or to open WAN ports on the router.

**Traffic Rules**

| Name             | Match   | Action       | Enable                              |   |
|------------------|---|--------------|-------------------------------------|---|
| Allow-DHCP-Renew | Incoming IPv4, protocol UDP<br>From wan<br>To this device, port 68  | Accept input | <input checked="" type="checkbox"/> | <input type="button" value="Edit"/> <input type="button" value="Delete"/> |
| Allow-Ping       | Incoming IPv4, protocol ICMP<br>From wan<br>To this device          | Drop input   | <input checked="" type="checkbox"/> | <input type="button" value="Edit"/> <input type="button" value="Delete"/> |
| Allow-IGMP       | Incoming IPv4, protocol IGMP<br>From wan<br>To this device          | Accept input | <input checked="" type="checkbox"/> | <input type="button" value="Edit"/> <input type="button" value="Delete"/> |
| Allow-DHCPv6     | Incoming IPv6, protocol UDP<br>From wan<br>To this device, port 546 | Accept input | <input checked="" type="checkbox"/> | <input type="button" value="Edit"/> <input type="button" value="Delete"/> |

Save & Apply

### 3. Traffic Rules

a. Configure traffic rules.

**Firewall - Traffic Rules - Unnamed rule**

**General Settings**

Name: Unnamed rule

Protocol: TCP UDP

Source zone: Device (output)

Source address: -- add IP --

Source port: any

Output zone:

Destination address: -- add IP --

Destination port: any

Action: accept

Any

☒ TCP

☒ UDP

☐ ICMP

☐ IGMP

☐ IPSEC-ESP

☐ -- custom --

Device (output)

Any zone (forward)

ipp (empty)

lan lan: 80

wan wwan0: 80

drop

accept

reject

Dismiss Save & Apply

- b. Add/Edit traffic rules.
4. The following are default network communication services on the device:
  - a. DNS outbound and inbound (53/UDP, 53/TCP): lookup of domain names to IP addresses.
  - b. NTP outbound (123/UDP): obtain date and time.
  - c. HTTP(S) inbound (80/TCP, 443/TCP): local user interface service.
    - i. Blocked from WAN side by default traffic rules.
  - d. AC-Cloud outbound (997/TCP, 443/TCP): remote device management.
  - e. AC-Cloud inbound (42138/TCP): remote device management.

**Airgain )))** Status System Network Logout

**eSIM Setup Flow**

**AC Cloud Subscription**

Status: Subscribed

The following settings are only accessible within a subscription.

**Ping Test After Activation/Device Reboot**

Enable ☐

**Profile Switching Conditions**

Enable ☐

**Revert to Initialization State**

Revert to do initial profile downloading **Revert**

**Save & Apply**

### viii. eSIM Setup Flow

1. AC-Cloud Subscription will indicate the status of subscription.
2. Enable Ping Test for additional confirmation the eSIM profile is connected to the cellular network.
  - a. Device will always check for an IP address by default which is displayed under Network on the Overview page.
3. Enable Profile Switching Conditions for configuring how long after the current eSIM profile loses connectivity before automatically switching to the next priority.
4. The Revert button activates the bootstrap profile for syncing with AC-Cloud if a connection cannot be established with existing eSIM profiles or Depot Mode.
  - a. The bootstrap profile has limited data so should only be used if necessary.

**Ping Test After Activation/Device Reboot**

Enable ☒

Test host option(s)

🔗 A maximum of 3 hosts may be permitted.

Number of test packet(s)

🔗 The range from 1 to 5 packets. A response from any packet means success, otherwise it means failure.

5. Enabling Ping Test After Activation/Device Reboot requires that an eSIM profile satisfy the ping test settings to confirm cellular connectivity after booting up.
  - a. Test host options(s)
    - i. Will accept IPv4, IPv6 or a hostname such as google.com.
  - b. Number of test packet(s)
    - i. Define number of ping test requests that must respond within 2 seconds.

### Profile Switching Conditions

Enable ☒

Lose connection for (seconds)

🔗 The range is from 5 to 120 seconds.

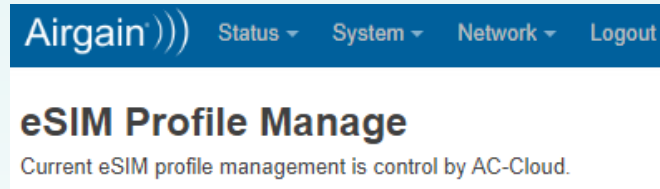
Ping test enable ☒

Ping latency exceeds (ms)

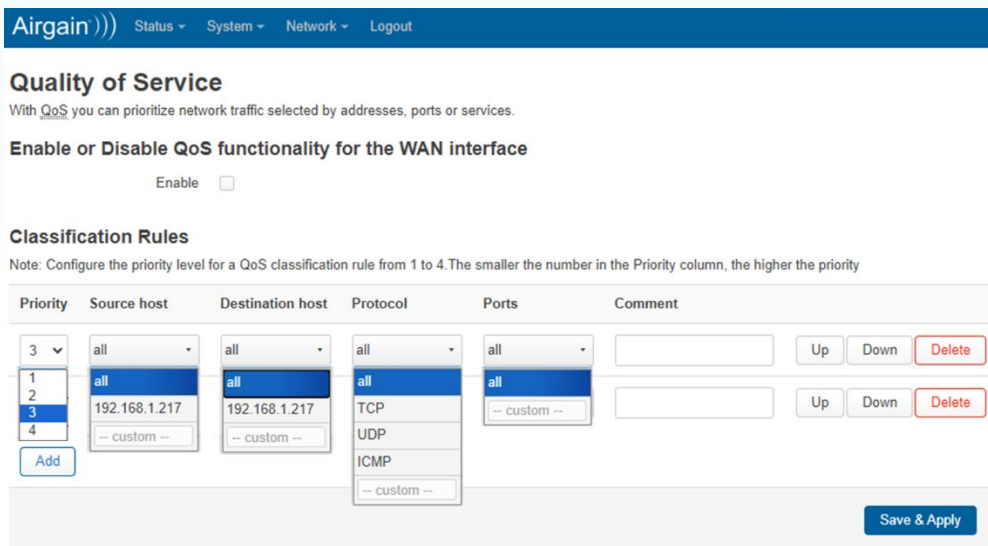
🔗 The range is from 500 to 1500 milliseconds.

Ping test host

6. Enabling Profile Switching Conditions will allow for the device to automatically switch to the next priority eSIM profile if cellular connectivity is lost.
  - a. Lose connection for (seconds)
    - i. Device will check for a loss of IP every 5 seconds and trigger a switch if the configured time limit is reached.
  - b. Ping test enable requires that an eSIM profile satisfies the ping test settings to confirm cellular connectivity.
    - i. Ping test host will accept IPv4, IPv6 or a hostname such as google.com.



- ix. eSIM Profile Manage
  1. Not applicable with active AC-Cloud subscription.



- x. QoS
  1. Configure Quality of Service settings.

## 4. Customer Support

For any questions, please contact Airgain Support: [support@airgain.com](mailto:support@airgain.com)