Unit: mm (inch)

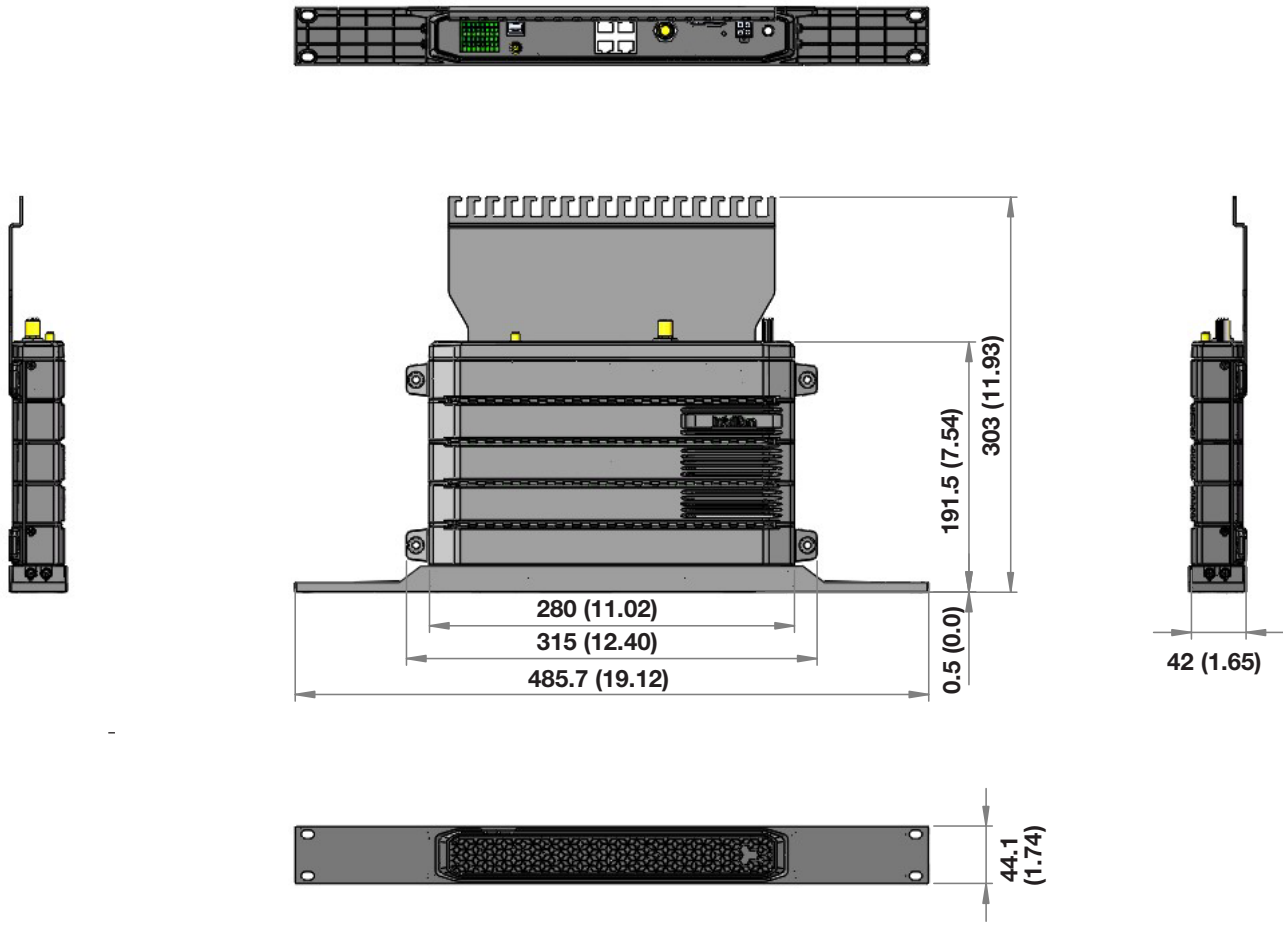


Figure 17: BDU Dimensions (19-inch Rack Mounting Type_Optional)

6.2 Selecting BDU Installation Site

The BDU should be installed below the deck in a location that is dry, cool, and ventilated. The front panel of BDU should be easily accessible to users.

6.3 BDU Mounting Template

The BDU mounting holes must be in the exact same place as shown in the provided mounting template below.

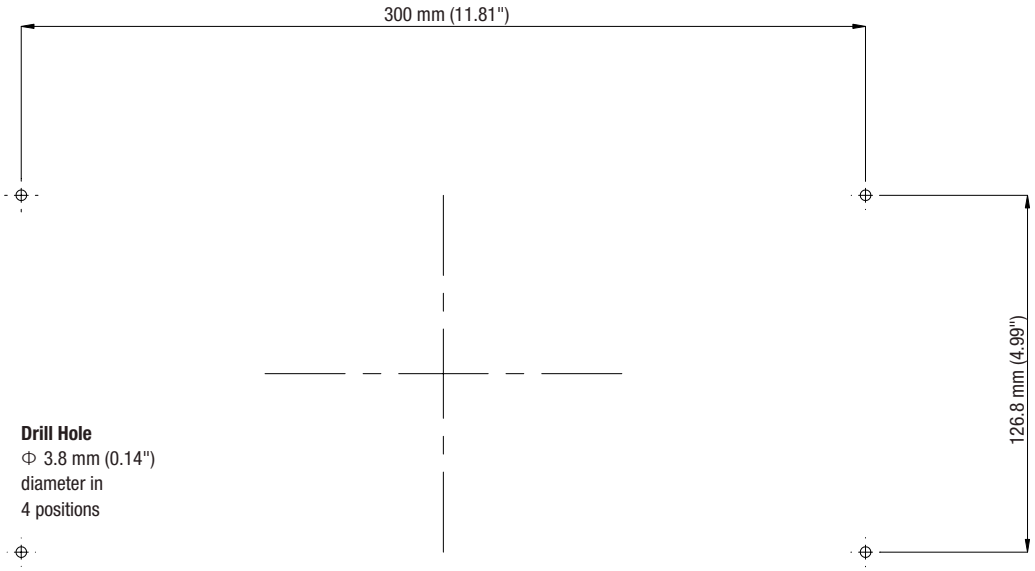


Figure 18: BDU Mounting Template

6.4 Mounting BDU

The BDU can be mounted in any orientation but for best performance, Intellian recommends that it is mounted horizontally.

WARNING

Ensure that the cables connected to the BDU are long enough to prevent damage when the BDU is pulled out from the rack.

6.4.1 Direct Mounting Type

The BDU is designed with four corner mounting holes to make direct mounting on the wall or desktop easy.

1. Mount the BDU on the mounting surface by inserting four screws through the mounting holes.

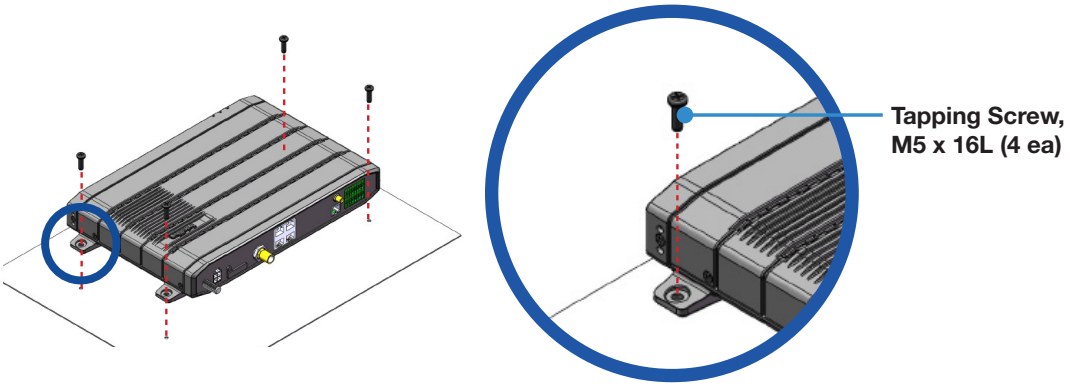


Figure 19: Direct Mounting of BDU

6.4.2 19-inch Rack Mounting Type (Optional)

Intellian offers the BDU Rack Mount Kit (separate purchase) including the rackmount plate and connector tray to mount the BDU in a 19" rack.

1. Using the Screws supplied, attach the connector tray to the BDU.

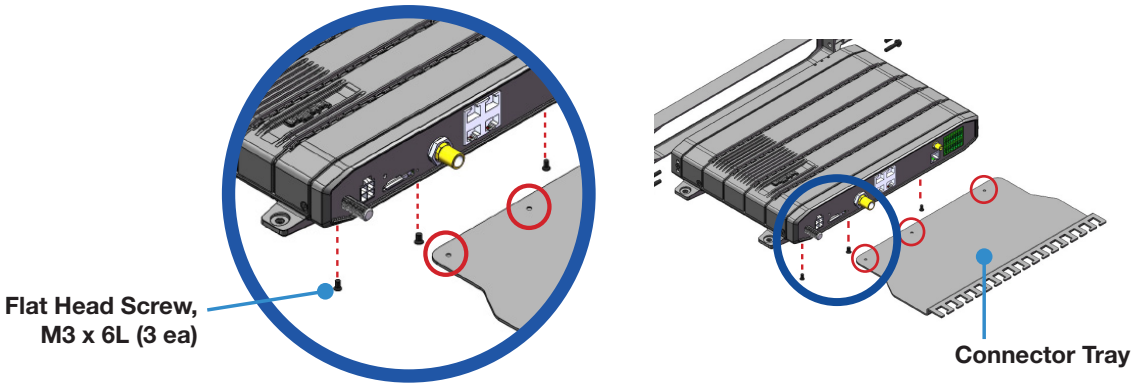


Figure 20: Attach Connector Tray to BDU

2. Using the Screws supplied, attach the rackmount plate to the BDU.

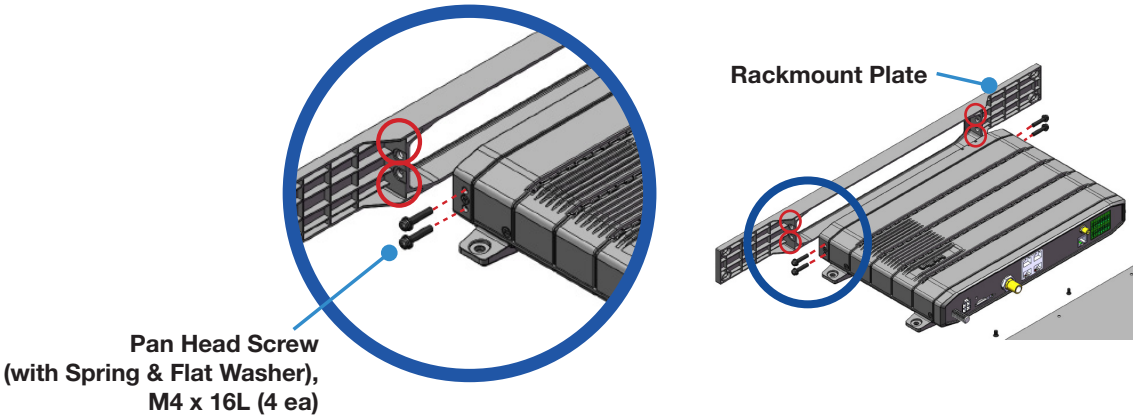


Figure 21: Attach Rackmount Plate to BDU

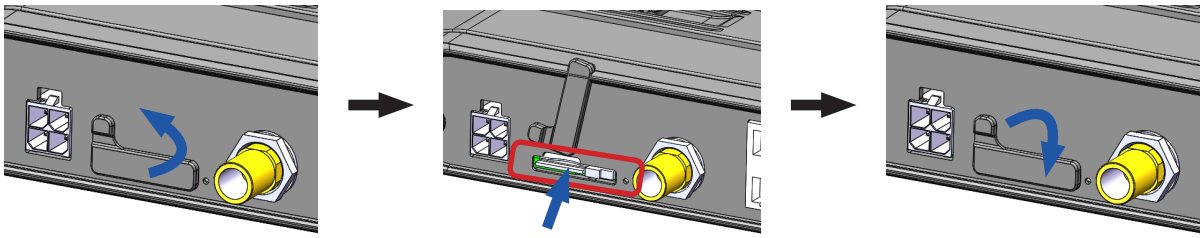
3. Slide the BDU assembly into a 19" rack frame. Mount the screws in each side through the holes in the front and fasten the screws to the rack. Make sure that the BDU assembly is mounted securely according to the requirements for your 19" rack. In case of using a provided AC-DC adapter for AC power connection, mount it securely in a safe place. After connecting all cables, fix the cables on the end of the connector tray using cable ties.

Figure 22: Mount BDU Assembly into 19" Rack

6.5 Setting up SIM Card

6.5.1 Inserting SIM Card

The system requires a SIM card from the service provider to use the terminal and configure the settings of the BDU.



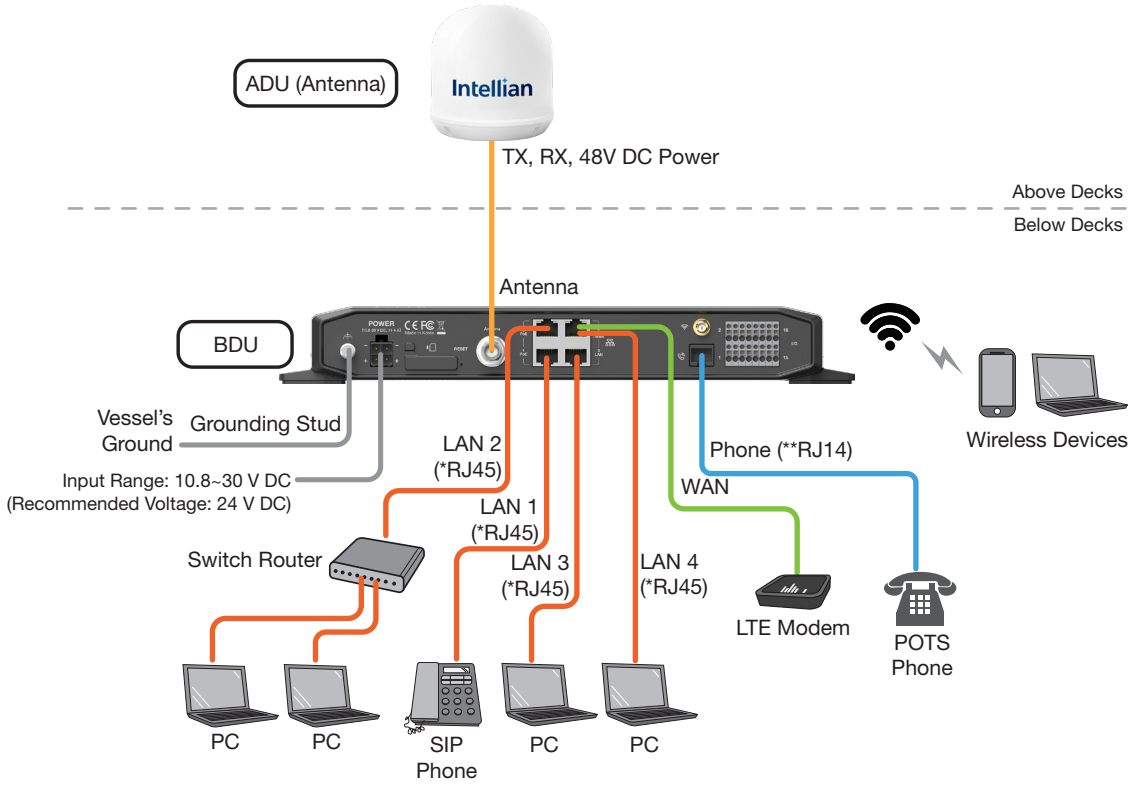
1. Pull the SIM card protective cover away from the BDU and expose the SIM card slot.
2. Install the SIM card by pushing it in the slot until it clicks into place. The contact surface of the SIM card faces down.
3. After the SIM Card has been locked into place, secure the SIM Card cover.

NOTE

If the SIM card is not detected properly (“No USIM” message is displayed on the dashboard), remove and re-insert the SIM card or turn the BDU power off and on again with the SIM card inserted.

6.6 Antenna System Configuration

The basic system consists of one antenna and one BDU. Separate purchase of standard items including POTS phones, SIP phones, computers, etc. may be needed. A modem can be connected to the WAN port for data at least-cost routing operations. Voice calls are always routed through the Iridium system unless using a data call application. For your satellite communication system to work properly, connect the cables according to the configuration below.



* RJ-45 Cable Length: 3m or more
** RJ-14 Cable Length: 3m or more

Figure 23: F4-A250-S System with Connected Devices

6.6.1 Data sessions and voice calls

The System provides up to High-quality voice calls, multiple data sessions, Wi-Fi, and supports up to 18 extensions (including 2 analog phones and 16 sip phones).

The BDU communicates directly with SIP phones on any of the three LAN user ports (LAN 1, 2, 3, or 4). The SIP phones register directly to the SIP server in the BDU.

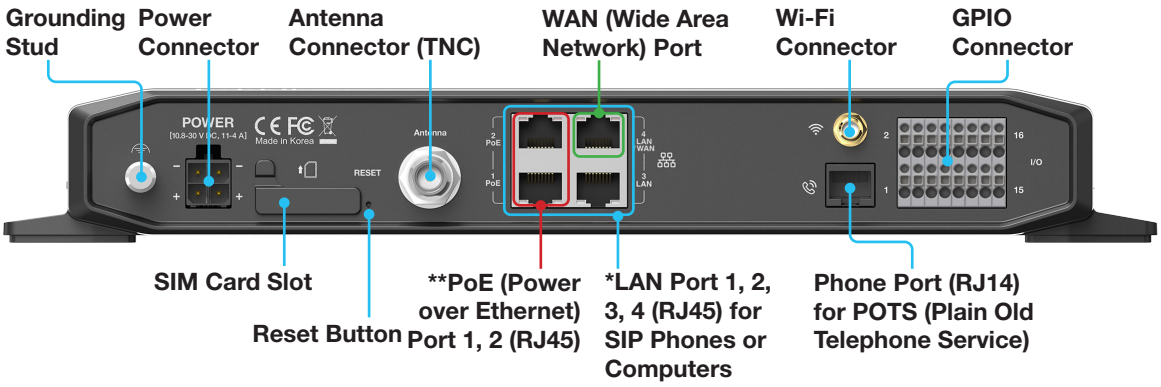
Supported VoIP Phones

- Grandstream GXP16 Series: 1610, 1615, 1620, 1625, 1628, 1630
- Grandstream GXP17 Series: 1760, 1780
- Grandstream GXP21 Series: 2120, 2130, 2135, 2140, 2160, 2170
- Grandstream GXV32 Series: 3240, 3275

6.7 BDU Cable Connection

6.7.1 BDU Back Panel View

The following figure shows the BDU back panel.



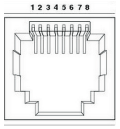
* All LAN ports are IEEE 802.3 compliant.
** Each PoE Port is designed to use 7.5W power. When using over 12.5W in one port, the PoE function will be stopped in port 1 or port 2.

Figure 24: BDU Back Panel View

6.8 BDU Connector Pinout Guide

The BDU connector pins and their corresponding descriptions are shown in the following figures and tables

6.8.1 LAN Ports (RJ45)

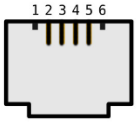


RJ45 Connector

Pin	Signal
1	TD+
2	TD-
3	RD+
4	NC
5	NC
6	RD-
7	NC
8	NC

Figure 25: LAN Ports (RJ45) Pinout

6.8.2 Phone Port (RJ14 & 6P4C)



RJ14 & 6P4C (6-Positions 4-Contacts)

Pin	Signal
1	N/A
2	T2+ (POTS Phone 2, no. 102)
3	R1- (POTS Phone 1, no. 101)
4	T1+ (POTS Phone 1, no. 101)
5	R2- (POTS Phone 2, no. 102)
6	N/A

Figure 26: Phone Port (RJ14 & 6P4C) Pinout

When connecting RJ14 phones, it is recommended to use a separate cable splitter (customer supplied). The POTS phone 1 (no. 101) is connected to a pair of Pin 3 (R1-) and Pin 4 (T1+) wires. The POTS phone 2 (no. 102) is connected to a pair of Pin 5 (R2-) and Pin 2 (T2+) wires.

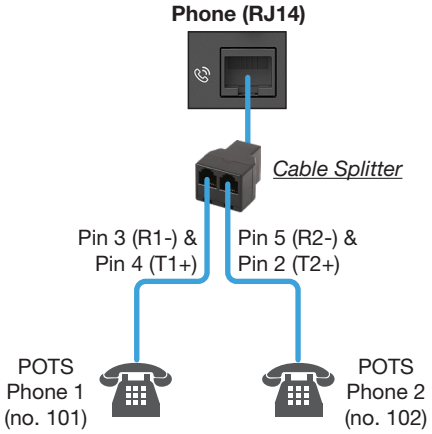
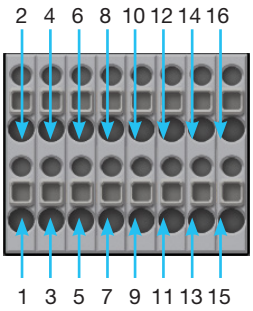


Figure 27: Using Cable Splitter with RJ14 Phones

6.8.3 General Purpose Inputs/Outputs (GPIO) Connector

All wires for the GPIO connector must use AWG 24 unscreened wire type.

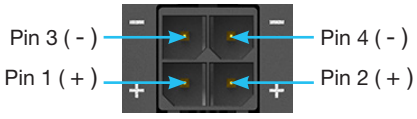


GPIO Connector

Pin	Signal	Pin	Signal
1	External Power Input	2	External Power Return
3	Input 1	4	
5	Input 2	6	
7	Reserved	8	
9	Output 1	10	
11	Output 2	12	
12	Output 3	14	
15	Remote Power On/Off	16	

Figure 28: GPIO Connector Pinout

6.8.4 Power Connector (DC Power)



DC Power Connector

Pin	Signal
1	+
2	+
3	-
4	-

Figure 29: DC Power Connector Pinout

6.8.5 Connecting BDU to ADU (Antenna)

Connect the **RF Cable** from the **ANTENNA** connector on the back of the BDU to the **RF Connector** on the radome bottom (Antenna).

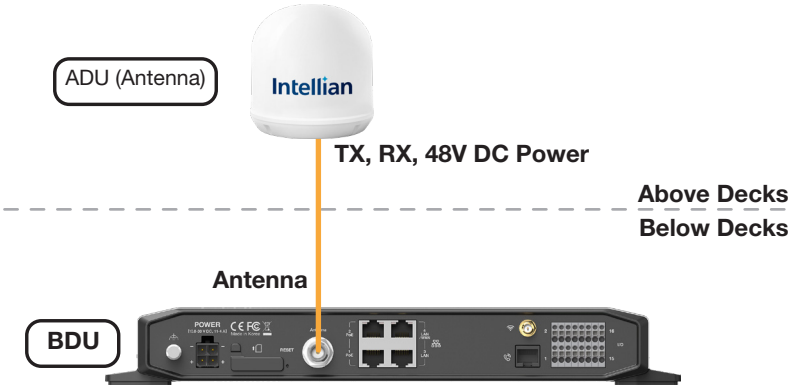


Figure 30: BDU to Antenna Cable Connection

6.9 Grounding Stud

The BDU should be grounded. Use a heavy ground cable (customer supplied) to connect the BDU to the vessel's ground during normal use. A safety grounding system is necessary to protect your radio hardware from lightning strikes and the build-up of static electricity. The grounding system must comply with the safety standards that apply in your country.

Ground the BDU using a heavy ground cable (not included) from the **Grounding Stud** of the BDU back panel to the vessel's ground to protect the system from unwanted surges and voltage differentials.

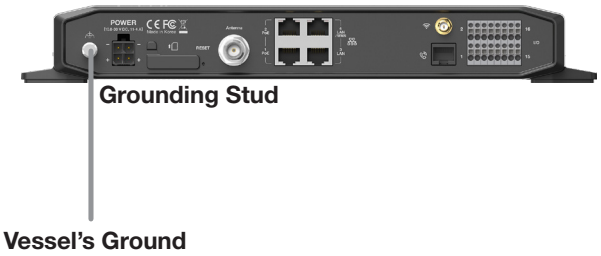


Figure 31: Grounding Stud Connection

Chapter 7. Operating BDU

The BDU and ADU are connected through single coaxial cable through which power from BDU is delivered to ADU and Ethernet data is exchanged between the BDU and ADU. The BDU controller is responsible for all the terminal management, system monitoring, control, error detection, and maintenance operations.

7.1 BDU Front Panel

The following figure shows the BDU's front panel.

Figure 32: BDU Front Panel

The following table shows status indicators on the face of BDU.

LED Indicator	Color	Description
Power	Off	The BDU is powered off.
	Blinking	The BDU is booting a system. The BDU is calibrating a system. The system is in error. There is no SIM card inside BDU.
	Steady Green	The BDU is powered on.
Satellite	Off	The antenna is not connected to a satellite.
	Blinking	The antenna is acquiring a satellite. The antenna is searching for a satellite.
	Steady Green	The antenna is connected to a satellite.
Event	Off	The antenna has no event (call or data).
	Blinking	The antenna has an alert, an unread message, an incoming call.
	Steady Green	The antenna has a voice or data.

NOTE: When 3 LEDs blink simultaneously, the BDU is in a low power state. Check the current input voltage status.

7.2 Powering On System

Use the power ON/OFF button on the BDU's front panel. Wait for all LED indicators to turn green to indicate the system is completely powered up.

7.3 Making POTS Phone Call

To make POTS phone calls, do as follows:

1. Connect an ethernet cable from the Phone Port (RJ14) on the back of the BDU to the POTS phone.

NOTE

When connecting a cable to Phone Port (RJ14), refer to the following; The analog phone 1 (no. 101) is connected to a pair of Pin 3 (R1-) and Pin 4 (T1+) wires. The analog phone 2 (no. 102) is connected to a pair of Pin 5 (R2-) and Pin 2 (T2+) wires.

2. Lift the POTS phone and listen for a dial tone.
3. Call a known number to test call and voice clarity Dial Country code, area code, and phone number #.

7.4 Using PoE Devices

7.4.1 Accessing Internet

To use PoE Devices and Wireless Devices, you need to access the Internet. The network is automatically configured by DHCP without the need for additional PC IP configuration.

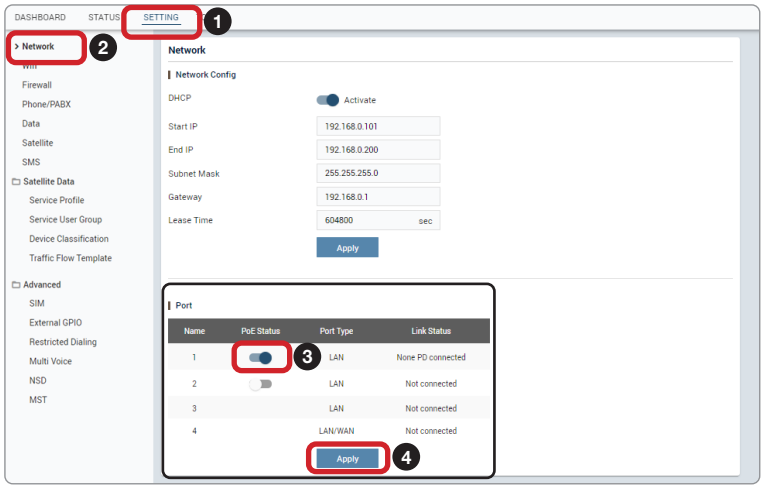
1. Connect an Ethernet cable from the **PoE Port 1** or **PoE Port 2** on the back of the BDU to devices. The network connection is established automatically.
2. Use the following IP address to access the Intellian AptusLX Web page.

- **IP Address: 192.168.0.1 (Default)**

3. Log into the AptusLX Web by typing in a user name and password information. If this system has not been changed from the factory default:

- **User Name: intellian**
- **Password: 12345678**

4. Select the **SETTING** on the main menu then go to the **Network ➔ Port** menu.
5. Toggle PoE button to the ON position on the port 1 or port 2. If you don't want to use PoE connection, choose the OFF position.
6. Select the **LAN** from the **Port Type** drop-down list.
7. Click the **Apply** button to apply the settings to the system.



7.5 Using Wireless Devices

7.5.1 Installing Mobile Application

To be able to use a mobile phone you must install a compatible mobile application. Intellian recommends using the following mobile application:

Grandstream Wave App

- **App Store: https://itunes.apple.com/us/app/grandstream-wave/id1029274043?ls=1&mt=8**
- **Google Play: https://play.google.com/store/apps/details?id=com.grandstream.wave**

7.5.3 Setting up Wi-Fi

You can connect to the BDU via Wi-Fi for easy management and control whenever you are on the vessel.

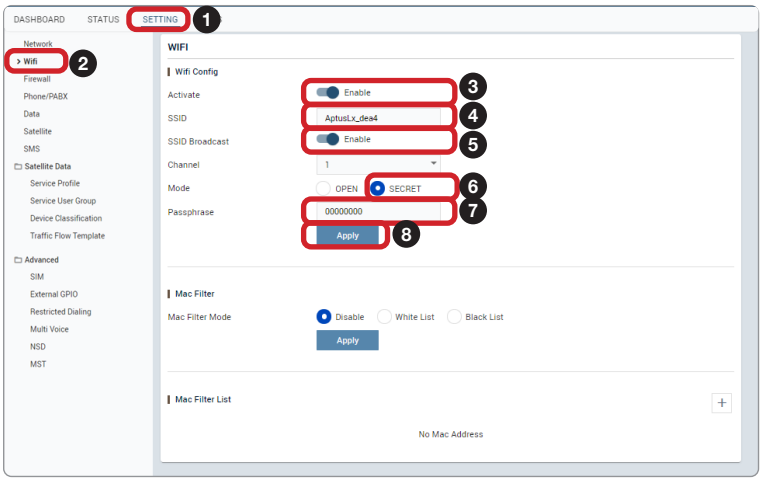
1. Bring the Wi-Fi Antenna located in the BDU package. Plug the Wi-Fi Antenna into the USB port on the back of the BDU.
2. Connect an Ethernet cable from the **LAN Port 1**, **LAN Port 2**, **LAN Port 3,** or **LAN Port 4** on the back of the BDU to the LAN port of PC. The network connection is established automatically.
3. Use the following IP address to access the Intellian AptusLX Web page.

- **IP Address: 192.168.0.1 (Default)**

4. Log into the AptusLX Web by typing in a user name and password information. If this system has not been changed from the factory default:

- **User Name: intellian**
- **Password: 12345678**

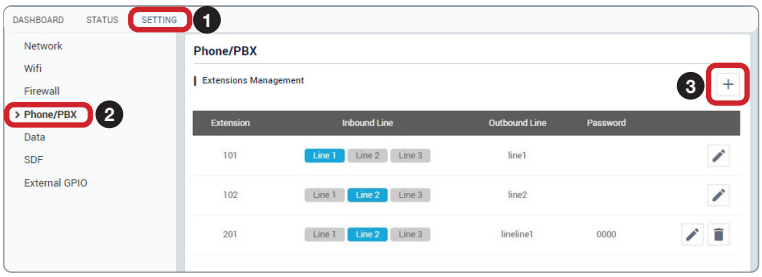
5. Select the **SETTING** on the main menu then go to the **Wifi ➔ Wifi Config** menu.
6. Toggle Activation button to the **Enable** position on the **Activate**. If you don't want to use Wi-Fi Connection, choose the **Disable** position.
7. Check the **SSID (Wi-Fi AP Name)** information.
8. Choose the SSID Broadcast **Enable** button to show the SSID (Wi-Fi AP Name) on the Wi-Fi list.
9. Click the **SECRET** button on the **Mode** menu.
10. Set a Wi-Fi password on the **Passphress** menu.
11. Click the **Apply** button to apply the settings to the system.
12. Connect to the Wi-Fi you set.



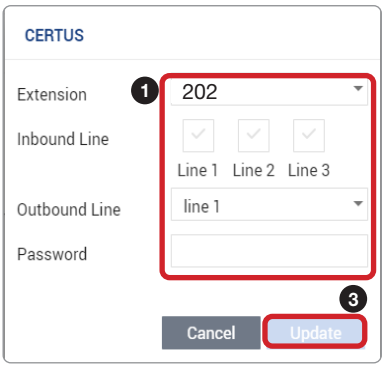
7.5.2 Setting up New Extension (Optional)

If voice services are required, set up the new extension of the terminal.

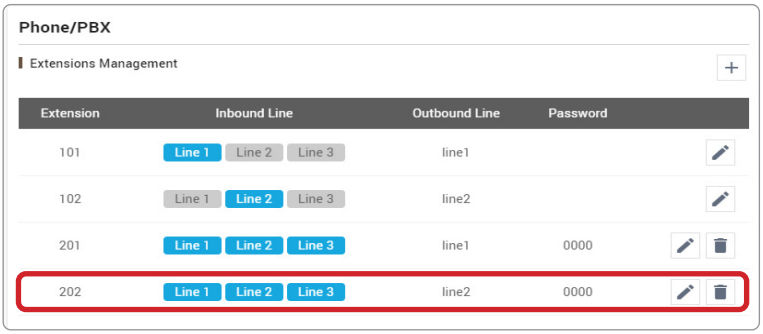
1. Select the **SETTING** on the main menu then go to the **Phone/PBX** menu.
2. To add a new extension, click the **Add** button (plus symbol).



3. The registration window will appear in the pop-up window. Enter the new extension information. When you want to use the external call, select the **Inbound Line** and **Outbound Line**. Click the **Update** button.



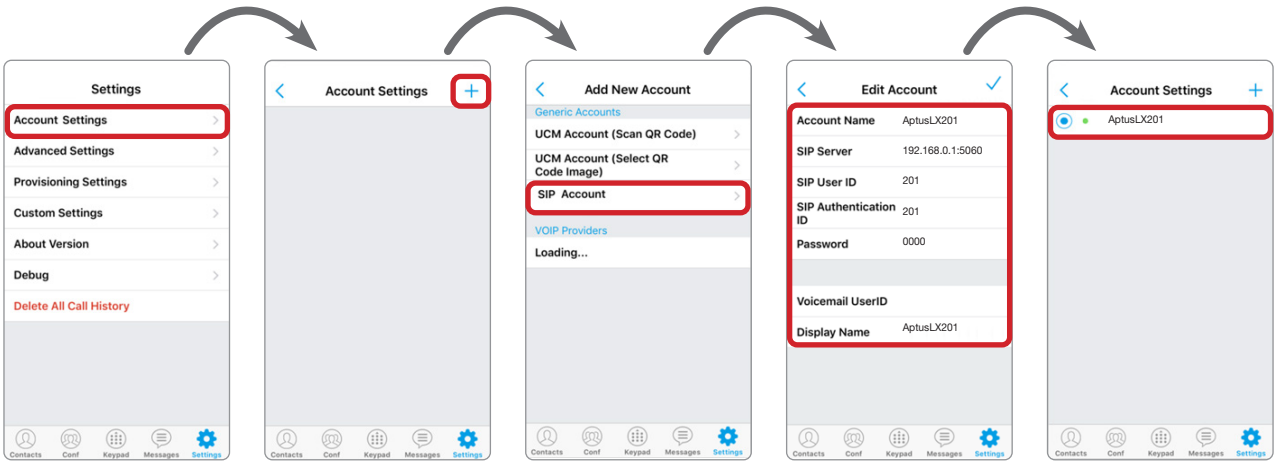
4. Check the new extension added.



7.5.4 Making Wireless Device Call

Using Grandstream Wave App (Recommended) through Mobile Phone

To make a call on your mobile phone, Intellian recommends using the Grandstream Wave app. Follow steps below to set up your mobile phone.



Chapter 8. Using AptusLX

8.1 Introduction

With the embedded **AptusLX** software, the antenna can be monitored, controlled, and diagnosed remotely, anytime through the TCP/IP protocol. It saves your time and cost generated by various maintenance activities such as operating firmware upgrades, tracking parameter resets, and system diagnosis, etc.

8.1.1 How to Access Internal Webpage of BDU

The network is automatically configured by DHCP with no additional PC IP configuration.

1. Connect an Ethernet cable from the **LAN Port 1**, **LAN Port 2**, **LAN Port 3,** or **LAN Port 4** on the back of the BDU to the LAN port of PC. The network connection is established automatically.
2. Enter the BDU IP address (**Default: 192.168.0.1**) or (**https://portal.aptuslx.local**) into the address bar of the web browser to login to the internal HTML page of BDU.

NOTE

AptusLX works on Internet Explorer 11 or higher (Windows 7 or higher editions), Firefox, Microsoft Edge and Chrome web browsers.

If you're having trouble connecting your Chrome web browser to the internet, try the steps below.

1. On your computer, open Chrome.
2. Delete your Chrome browsing history;
   - 2-1. At the top right, click More ⋮ .
   - 2-2. Click History > History.
   - 2-3. On the left, click Clear browsing data. A box will appear.
   - 2-4. From the drop-down menu, to clear everything, select All time.
   - 2-5. Check the boxes for the info you want Chrome to clear, including "browsing history."
   - 2-6. Click Clear data.
3. Clear all cookies;
   - 3-1. At the top right, click More ⋮ > Settings.
   - 3-2. Under "Privacy and security," click Cookies and other site data.
   - 3-3. Click See all cookies and site data > Remove all.
   - 3-4. Confirm by clicking Clear all.

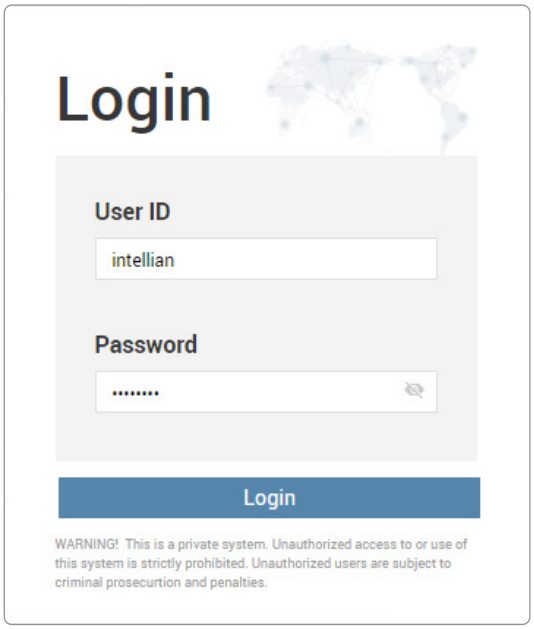
8.2 Main Page

8.2.1 Page Login

The Intellian software Aptus provides different user access levels to protect the system for safe operation. Depending on the user level, the accessible range of functions in the software can be limited.

1. Log into the BDU by typing in User Name and Password information. If this system has not been changed from the factory default:

User ID	Password	Access Authority
intellian	*12345678*	Supports all menus for monitoring and setting.
guest	*guest*	Only some menus for monitoring are supported.



NOTE

After entering the default password, the user must change the default password to a new password for security. If you have forgotten your ID and/or password, you can reset it on the Reset ID/Password menu. Refer to the "8.4 Account Menu" on page 48.

8.3 Top Menus

Once you log in, the following information and menus are displayed. The overall state of the system is always displayed in the system status field.

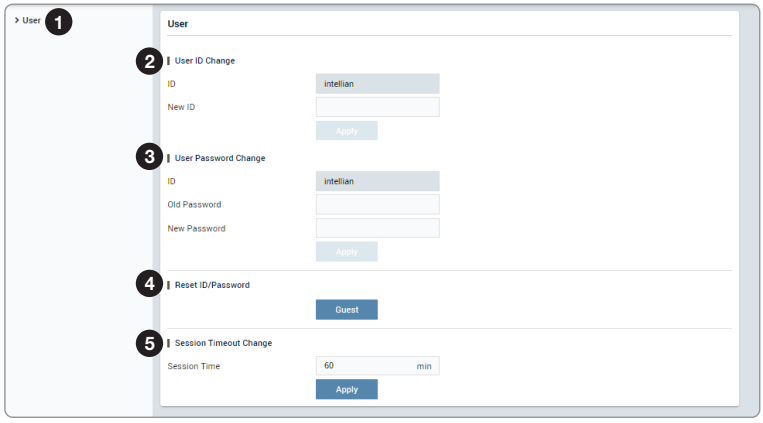
No.	Item	Description
①	Satellite Status	Displays the status of the satellite network connection. • Off: The system is not detected in the satellite network. • Steady Green: The system is detected in the satellite network. Ready to connect. • Blinking Green (Acquiring): The system is connecting to the satellite network. • Steady Blue: The system is registered and connected to the satellite network. • Steady Red: Registration on the network was denied. If the SIM card is inserted incorrectly, insert the SIM card in place. Refer to the "6.5.1 Inserting SIM Card" on page 34. If there is no error with the SIM card status, contact the service provider.
②	WAN Status	Displays the status of the wide-area network (WAN) connection. The system connects to the WAN according to the setting of the routing policy. You can also check the status of the WAN connection on the 'Current Route Selection' panel of the "8.5 Dashboard" on page 49. • Steady Blue: The WAN is connected. • Red/Off: The WAN is not connected.
③	Wi-Fi Status	Displays the status of the Wi-Fi connection. • Off: The Wi-Fi connection is disabled. • Steady Green: The Wi-Fi connection is enabled. Ready to connect. • Steady Blue: The Wi-Fi is connected.
④	Signal Strength	Displays the current signal level. • Off: The network is disabled. • Steady Green: The network is enabled. Displays the current signal level.
⑤	System Power	Displays the current system power. • Steady Blue: The system is in normal operation. • Steady Red: A error is detected.
⑥	Call	Displays the status of the call connection. • Steady Green: The extension call is available. • Steady Blue: The extension and external call is available. • Blinking Blue: The external call is active.
⑦	SMS	Displays new SMS messages in inbox.
⑧	Main Menu	Select the Main Menu. Each main menu offers side menus on the left of the screen.
⑨	Disconnection Button	Select the **Disconnection** button to terminate all PDP connections.
⑩	Account Button	Select the **Intellian** button to manage your account details and select the **Logout** menu to log out of the AptusLX web page.

8.4 Account Menu

Click the **Intellian** button to manage the user account.

The **User** and **Info** menus are for user management. Click the **Logout** button to log- out of the AptusLX web page.

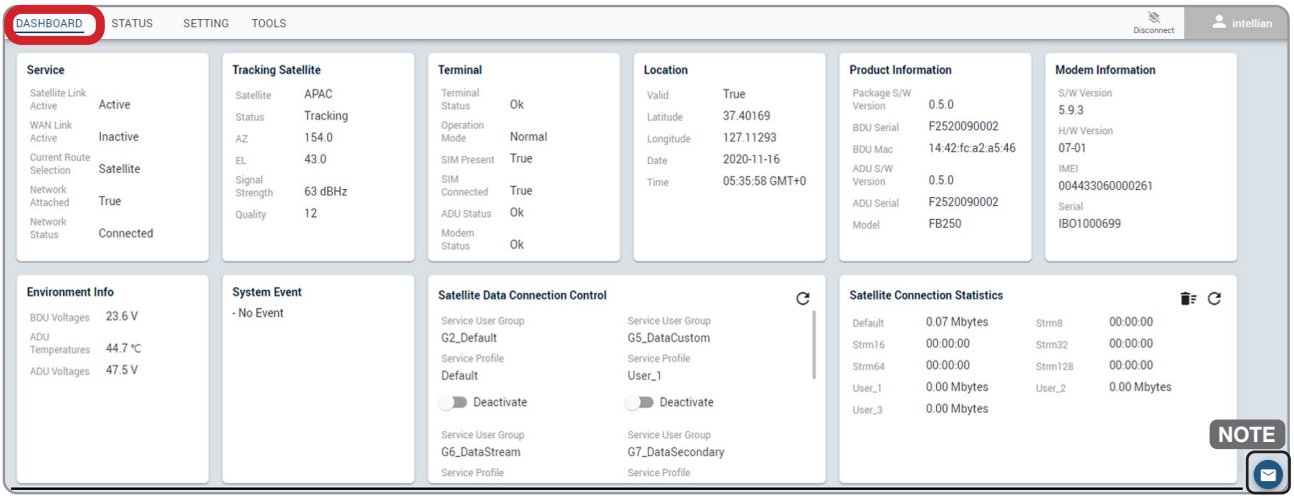
8.4.1 User



No.	Item	Description
①	User	Updates your password and ID.
②	User ID Change	You can change your password. • ID: Displays the user current ID. • New ID: Enter the new ID you want to change. Click the **Apply** button to set the ID to the new ID.
③	User Password Change	You can change your password. • ID: Displays the user current ID. • Old Password: Enter the current password. • New Password: Enter the new password. Click the **Apply** button to set the password to the new password. For the next login, the new password is required.
④	Reset ID/ Password	If you have forgotten your ID and/or password, you can reset depending on your account level. The ***intellian*** account allows you to reset the ***guest*** account. Click the account button to reset to the default id and password. For the next login, the default id and password are required.
⑤	Session Timeout Change	Enter the session timeout (min.). Click the **Apply** button to apply the settings to the system.

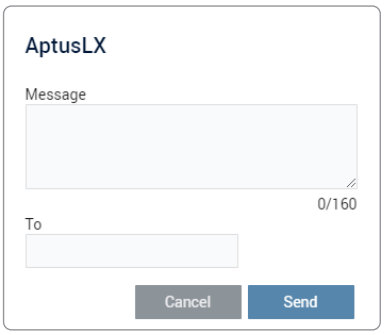
8.5 Dashboard

The Dashboard menu is displayed as below to provide quick monitoring of the antenna status. The Dashboard helps you arrange panels on a single screen while providing you with a broad view of a variety of information at once.



NOTE

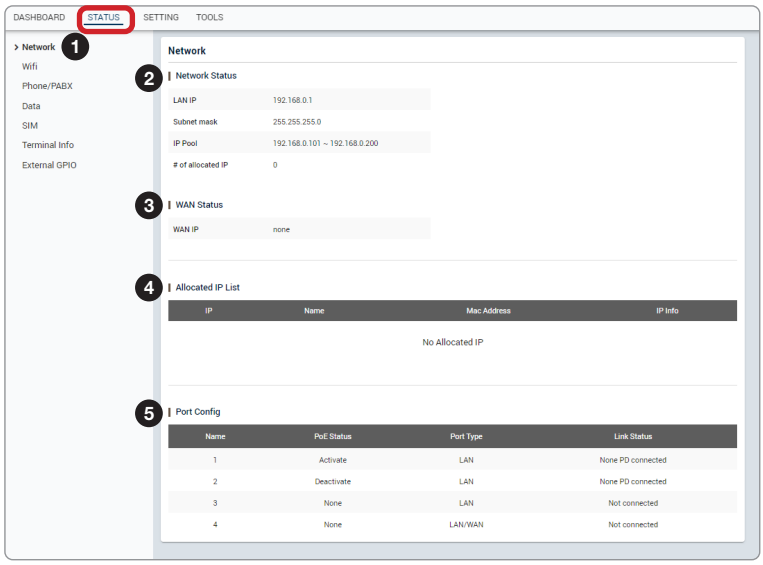
To send SMS click the letter icon. Then the pop-up window is opened. Write a message (Standard 3G, up to 160 characters per SMS). Click the **Send** button.



8.6 Status

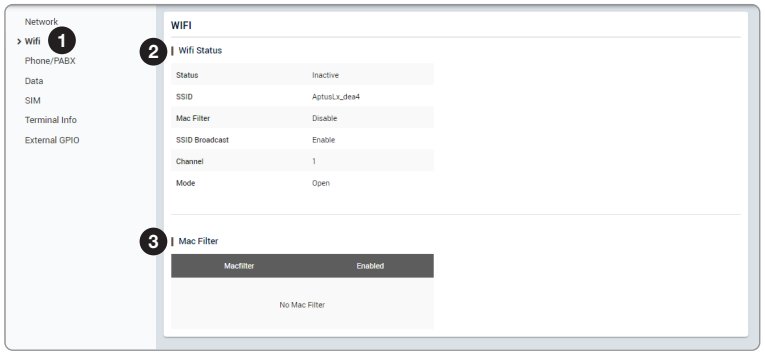
This menu displays the Network, Wi-Fi, Phone/PBX, Data, SIM, Terminal Info, and External GPIO function.

8.6.1 Network



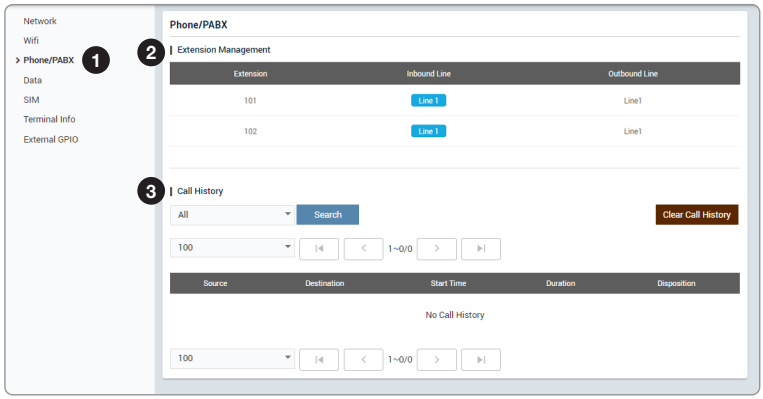
No.	Item	Description
①	Network	Displays the information about a network and ports.
②	Network Status	Displays the network information in use. • LAN IP: displays the network IP address (Factory default: 192.168.0.1). • Subnet Mask: displays the subnet mask (Factory default: 255.255.255.0). • IP Pool: displays the range of available IP. • # of allocated IP: displays the number of IP devices assigned.
③	WAN Status	Displays the WAN information in use. • WAN IP: displays the WAN IP address.
④	Allocated IP List	Displays the allocated IP list and information.
⑤	Port Config	Displays the switch port list (LAN or WAN port) and information.

8.6.2 Wi-Fi



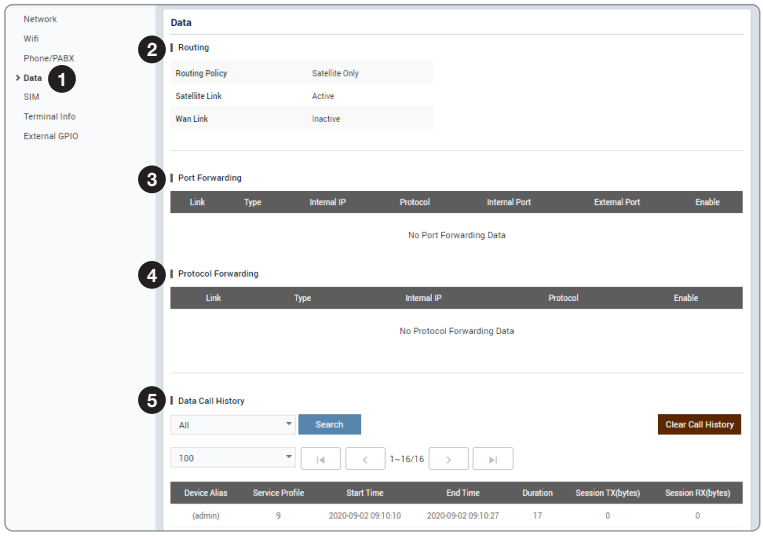
No.	Item	Description
①	Wi-Fi	Displays Wi-Fi access information.
②	Wi-Fi Status	Displays the Wi-Fi access point configuration. • Status: displays the Wi-Fi status (Active / Inactive). • SSID: displays the SSID network name. • Mac Filler: displays the MAC address filtering status (Enable/Disable). • SSID Broadcast: displays the SSID broadcast status (Enable/Disable). • Channel: displays the WLAN (wireless local area network) channel in use. • Mode: displays the security mode (Open/Secret).
③	Mac Filter List	Displays devices to either your whitelist or blacklist simply.

8.6.3 Phone/PBX



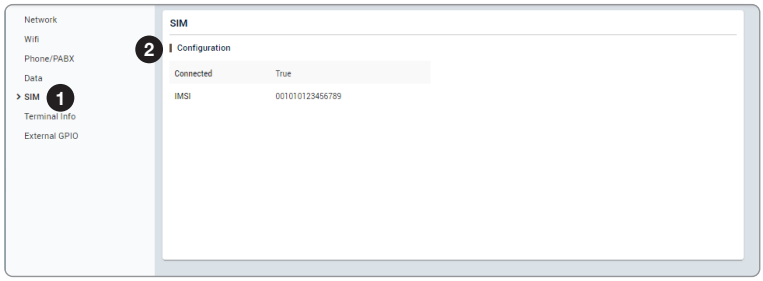
No.	Item	Description
①	Phone/PBX	Displays the phone and Private Automatic Branch Exchange (PABX) status.
②	Extension Management	Displays the extension number and details. • Extension: displays the registered extension. • Inbound Line: displays the inbound line in use through the blue indicator. • Outbound Line: displays the outbound line.
③	Call History	Displays the made and received call history log. You can set view details from the drop-down list. Remove the history by clicking the **Clear Call History** button.

8.6.4 Data



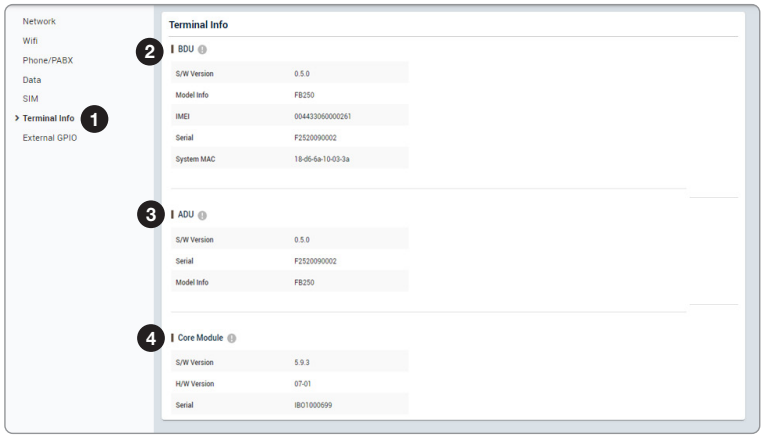
No.	Item	Description
①	Data	Displays the data setting status.
②	Routing	Displays the data route (None, Satellite Only, WAN Only) in use.
③	Port Forwarding	Displays the port forwarding data information.
④	Protocol Forwarding	Displays the protocol forwarding data information.
⑤	Data Call History	Displays the connected/disconnected data call history log. You can set view details from the drop-down list. Remove the history by clicking the **Clear Call History** button.

8.6.5 SIM



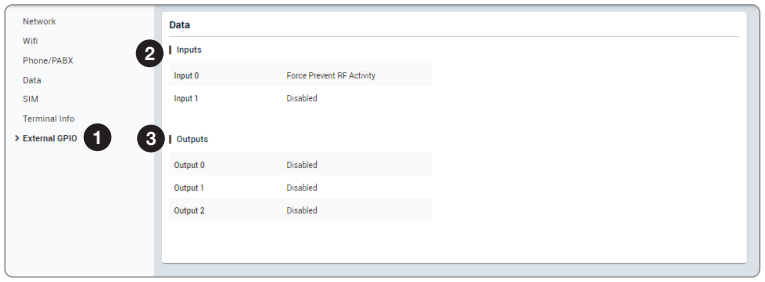
No.	Item	Description
①	SIM	Displays information about the SIM card.
②	Configuration	Displays the SIM card information in use. • Connected: displays connection status of the SIM card. The SIM must be inserted. • IMSI: displays a unique identifier to the SIM card.

8.6.6 Terminal info



No.	Item	Description
①	Terminal info	Displays the system terminal information.
②	BDU	Displays BDU information in use.
③	ADU	Displays ADU information in use.
④	Core Module	Displays the core module information in use.

8.6.7 External GPIO

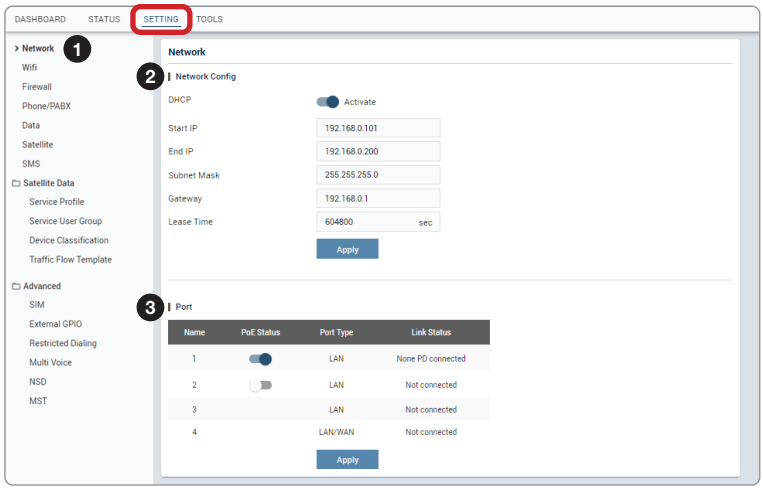


No.	Item	Description
①	External GPIO	Displays external GPIO.
②	Inputs	Displays input information in use.
③	Outputs	Displays output information in use.

8.7 Settings

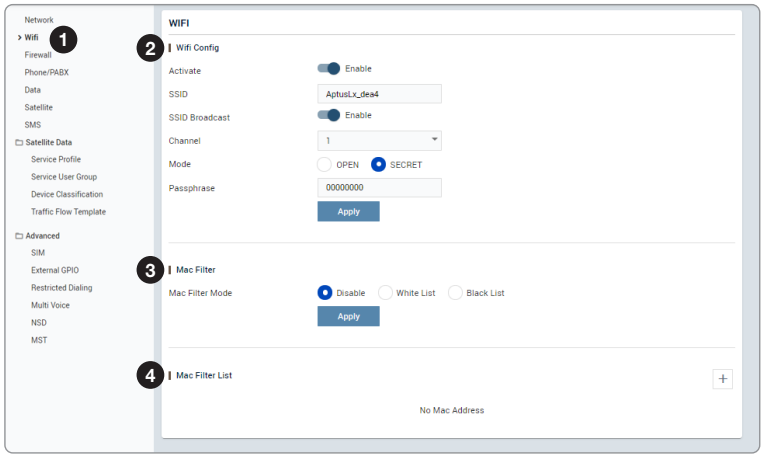
This menu sets and displays the Network, Wi-Fi, Firewall, Phone/PBX, Data, Satellite, SMS, Service Profile, Service User Group, Device Classification, Traffic Flow Template, SIM, External GPIO, Restricted Dialing, Multi Voice, NSD, and MST function.

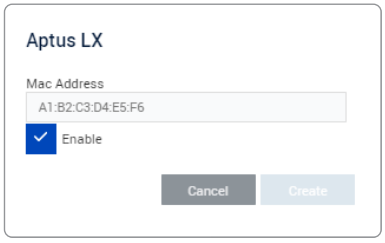
8.7.1 Network



No.	Item	Description
①	Network	Sets the information about a network and ports.
②	Network Config	Sets the network configuration. • DHCP: sets the DHCP function by toggling the activation button (Activate/ Inactivate). • Start IP: sets the start range of lease IP address. • End IP: sets the end range of lease IP address. • Subnet Mask: sets the subnet mask (Factory default: 255.255.255.0). • Gateway: sets the gateway IP address. • Lease Time: sets the lease time (sec). Click the **Apply** button to apply the settings to the system.
③	Port	Sets each switch port. • Name: displays the port mane (port 1, 2, 3, and 4). • PoE Status: sets the PoE function by toggling the activation button on port 1 and 2. • Port Type: the port 1 is fixed for LAN. The port 4 can be selected as LAN, SDF, or WAN from the drop-down list. Port 2 and 3 can be selected as LAN or SDF from the drop-down list. • Link Status: displays the link status (Up/Down). Click the **Apply** button to apply the settings to the system.

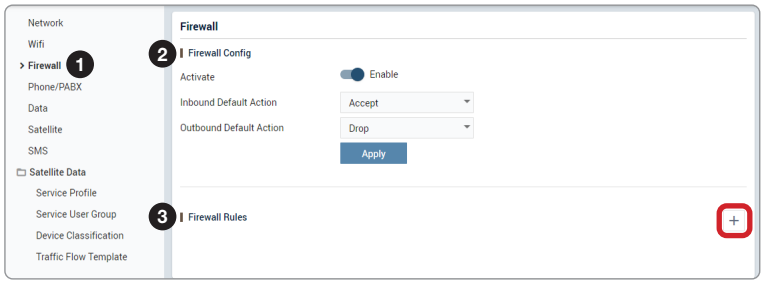
8.7.2 Wi-Fi

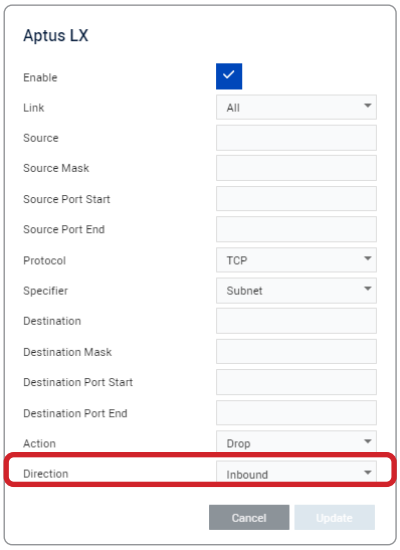




No.	Item	Description
①	Wi-Fi	Sets the Wi-Fi access information.
②	Wi-Fi Config	Sets the Wi-Fi access point configuration. • Activate: sets the Wi-Fi function by toggling the activation button (Enable/Disable). • SSID: the SSID is the network name shared among all devices in a wireless network. The SSID must be identical for all devices in the wireless network. It is case-sensitive and must not exceed 32 alphanumeric characters, which may be any keyboard character. Make sure this setting is the same for all devices in your wireless network. • SSID Broadcast: sets the SSID broadcast function by toggling the activation button (Enable/Disable). • Channel: selects an appropriate channel from the list provided to correspond with your network settings. All devices in your wireless network must use the same channel in order to function correctly. Try to avoid conflicts with other wireless networks by choosing a channel where the upper and lower three channels are not in use. • Mode: sets the security mode type (Open/Secret). • Passphrase: enter the user name connected to Wi-Fi. Click the **Apply** button to apply the settings to the system.
③	Mac Filter	Select the mac filter mode (Disable/White List/Black List). • Disable: the MAC filter is disabled. • White List: in Whitelist mode, the router will restrict LAN access to all computers except those contained in the "Mac Address" menu. • Black List: in Blacklist mode, the listed devices are completely blocked from local network access. Click the **Apply** button to apply the settings to the system. **NOTE**: Use caution when using the MAC Filter to avoid accidentally blocking yourself from accessing the router.
④	Mac Address	Displays the mac address. To create new mac addresses, click the plus icon. Then the pop-up window is opened. You can assign the new mac address. Click the **Create** button. The created mac addresses display on the list.

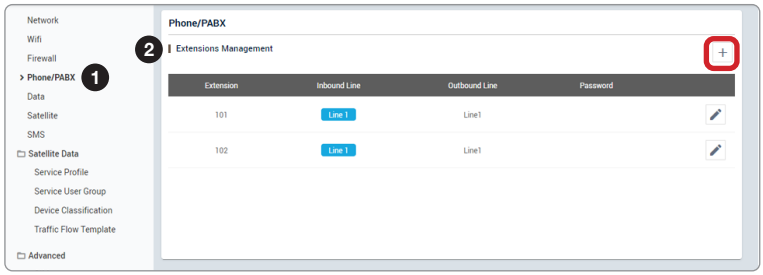
8.7.3 Firewall





No.	Item	Description
①	Firewall	Sets the firewall, network security system, which monitors and controls incoming and outgoing network traffic based on predetermined security rules.
②	Firewall Config	Sets the firewall configuration. • Activate: sets the firewall function by toggling the activation button (Enable/Disable). • Inbound Default Action: select the default settings for the incoming network from the drop-down list (Accept/Drop). • Outbound Default Action: select the default settings for the outgoing network from the drop-down list (Accept/Drop). Click the **Apply** button to apply the settings to the system.
③	Firewall Rules	Displays firewall rule lists. • Plus icon: To create new firewall rules, click the plus icon. Then the pop-up window is opened. Click the **Update** button. The created firewall rules are displayed on the list. - Enable: Select the checkbox to use the firewall rule. - Link: Select the link from the drop-down list. - Source: Enter the source. - Source Mask: Enter the source mask. - Source Port Start: Enter the source mask start. - Source Port End: Enter the source mask end. - Protocol: Select the protocol from the drop-down list. - Specifier: Select the Specifier from the drop-down list. - Destination: Enter the destination. - Destination Mask: Enter the destination mask. - Destination Port Start: Enter the destination mask start. - Destination Port End: Enter the destination mask end. - Action: Select the action from the drop-down list. - Direction: You can assign the new rule entered above to the **Inbound** (Inbound Default Action) or the **Outbound** (Outbound Default Action) in the **Direction** menu.

8.7.4 Phone/PBX



No.	Item	Description
①	Phone/PBX	Sets the phone and Private Automatic Branch Exchange (PABX).
②	Extensions Management	Sets the extension number and details. • Edit button: to edit the registered extension, click the edit button. Then the pop-up window is opened. You can edit details. • Delete button: to delete the registered extension, click the delete button. (Extension 101 and 102 have no delete button.) • Plus icon: To create new extension numbers, click the plus icon. Then the pop-up window is opened. You can assign the new extension number. Click the **Update** button. The created extension numbers are displayed on the list. - Extension: displays the registered extension. - Inbound Line: each inbound line can be controlled and managed by individual selection through the blue indicator. - Outband Line: displays the outbound line. - Password: displays the password.