POTS Adapter User Manual

April 2024

Table of Contents

1. Introduction

The Peplink POTS adapter allows for the replacement of POTS lines. It can be used with systems that require a POTS line for communication, such as elevators, alarm systems, fax machines, ATMs, emergency call boxes, etc.

1.1 Packing List

Package Content for POTS-ADP-LTE-US-T-PRM:

- 1x POTS Adapter
- 2x LTE Antennas
- 1x 12V 2A 4-Pin Power Supply (ACW-632)

Package Content for POTS-ADP-LTE-US-DC-T-PRM:

- 1x POTS Adapter
- 2x LTE Antennas
- 1x 10ft DC Power Cable (ACW-634)

1.2 Default Login Credentials

Login address: https://192.168.50.1 (via USB-C interface)
Username: admin
Password: admin

1.3 Power Options

The POTS adapter supports dual power options:

- Power Port (4-pin Micro-Fit connector)
- USB-C^

Both power options can be connected simultaneously. The primary power supply is the Power Port. In the event of a Power Port failure, the device will seamlessly transition to the USB-C power source. USB-C can be connected to a battery or a mini UPS to handle power loss events.

^The POTS Adapter does not support power bank charging via USB-C connector.

1.4 Supported Communication Protocols

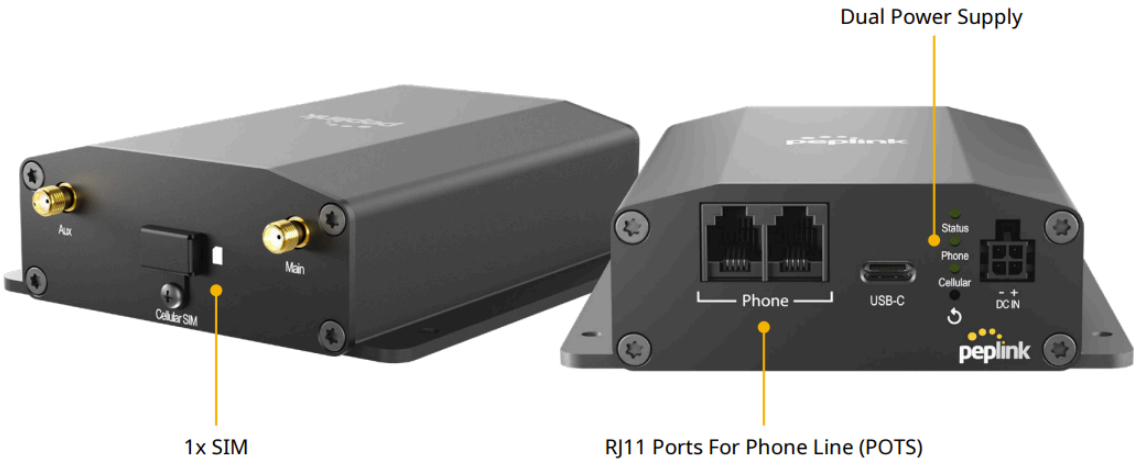
- Contact ID
- Pulse 4/2
- Voice: G.711, G.729, AMR, AMR-WB
- Fax: ITU-T.30/V.17/V.29/V.27ter/V.21

1.5 Supported Voice Features

- Audio notifications
- Call Forwarding (CFU/CFB/CFNRy/CFNRc)
- Call Hold
- Call Waiting
- 3-Way Conference
- CLIR per Call
- Speed Dial 8/30
- Call Return
- Call Blocking
- Do Not Disturb
- Caller ID
- VMWI
- DTME

2. POTS Adapter Overview

2.1 Panel Appearance



LED Indicator: The statuses indicated by the front panel LEDs are as follows:

Status Indicator		
Status	OFF	Power off
	Red	Booting up
	Steady Green	Ready
	Blinking Green	Upgrading firmware

Cellular Indicators		
Cellular	OFF	No Power or no SIM card inserted
	Blinking Green	Connecting to network(s)
	Steady Green	Connected to network(s)

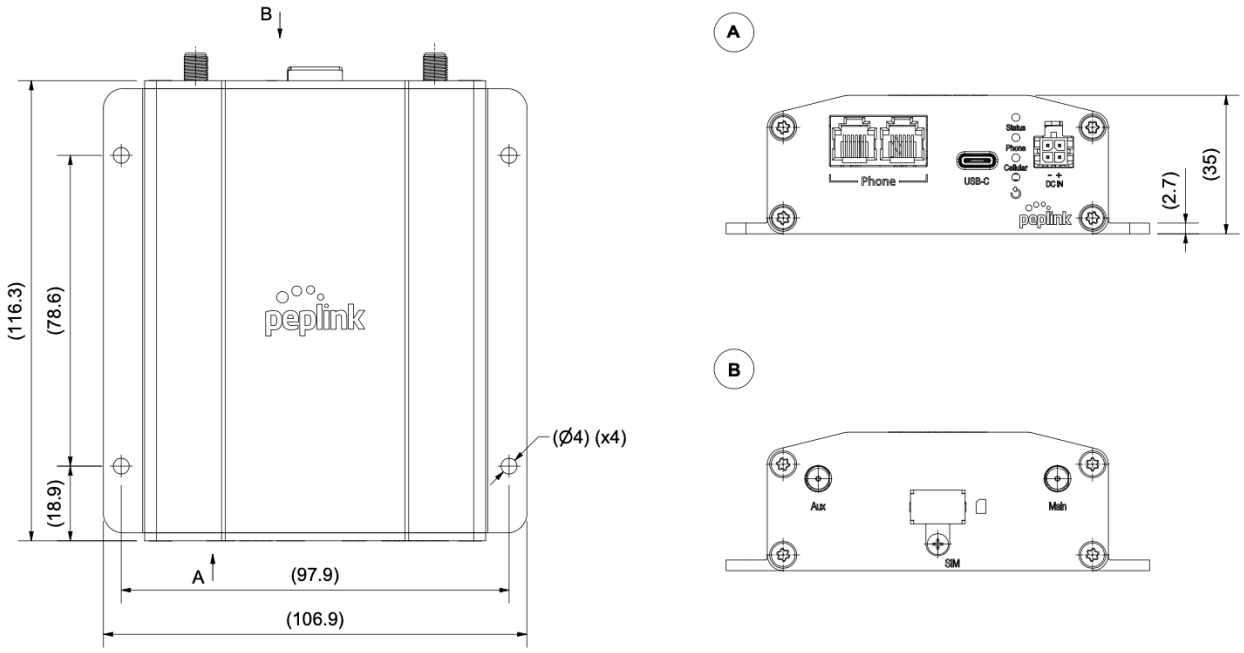
Phone Indicators		
Phone	OFF	No power
	Blinking Green	Device has a Voicemail
	Steady Green	Device is registered successfully and ready for a call

3. POTS Adapter Setup

Step 1: Locate and Mount the POTS Adapter

- Choose a safe and secure location that also provides sufficient room for the installation of cellular antennas and running of cables.
- Place the POTS Adapter antennas ideally away from large metal objects that may obstruct the signal.
- Securely mount the unit after identifying the location. The POTS Adapter can be fixed to a surface by fastening up to 4 screws through the holes on its integrated flange mount.^

^Please refer to the technical drawing below for the hole position details and other related dimensions.



Step 2: Antenna Installation^

- Attach the 2x LTE antennas to the POTS Adapter.
- Place the antennas perpendicular to the ground, pointing straight up.

^If required, install Peplink's Mobility Antennas with an extension cable and position antenna to get a better signal strength.

Step 3: Physical SIM Installation

- Untighten the screw of the SIM cover.
- Insert the physical SIM into the slot.

Step 4: Establish a Phone Line Connection

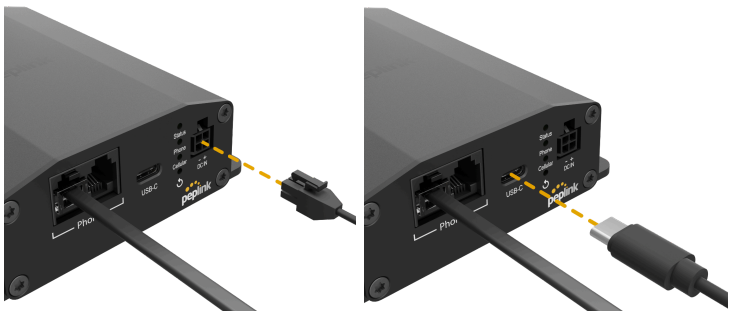
- To connect your “dialer” equipment to the POTS Adapter, you will need a cable with an RJ11 connector at one end and another connector that is compatible with the “dialer” equipment at the other end.
- Plug the RJ11 connector into the "phone" port on the POTS Adapter. This will enable the "dialer" equipment to communicate through the phone line service over VoLTE.

^ A “dialer” equipment refers to all standard POTS equipment which includes but is not limited to fire alarm control panels(FACP), security system alarm panels, elevator emergency phones, gate access phones or intercoms, fax machines, and office telephones.

Warning: Do not connect the RJ-11 phone port of the POTS adapter directly from the wall jack with active voltage. This will damage the device permanently. The “phone” port is only to be connected to a phone device or main console.

Step 5: Power Connection

- The POTS Adapter can be powered up with a single source of a 4-pin Micro-Fit connector or a USB-C (5V@2A) power supply.
- In case of an unforeseen power outage, a dual power setup is recommended for redundancy.



Step 6: **Configure the POTS Adapter**

- Check section 4 of “Access to POTS Adapter Configuration UI” for the detailed methods to access the configuration page.
- Modem settings can be configured in the Web-Admin interface as required.

Step 7: Check the LEDs Indication^

- Once the device is booted up, the "Status" light will turn steady green.
- Once the device is connected to the network, the "Cellular" light will turn steady green.
- Once the device is registered successfully and ready for a call, the “Phone” light will turn steady green.
- When all three green lights are steadily on, the device will now be ready for use.

^Please refer to the section 2.1 of this user manual for detailed information on LED behaviors.

4. Access to POTS Adapter Configuration UI

4.1 Local Access

Step 1: Connect the POTS Adapter to a device accessible to the WEB configuration UI via the USB-C interface.^

^The POTS Adapter utilizes the Remote Network Driver Interface Specification (RNDIS) to establish a connection with the WEB-based user interface. The RNDIS driver creates a virtual Ethernet link on your computer. Ensure that the RNDIS driver is installed on your computer. Please note that the RNDIS driver is available for Windows OS and Linux OS only. MacOS is not supported.

Step 2: Enter https://192.168.50.1^ as the URL of a browser. A login page will pop up.

^Please note the default IP address could be occupied by the upstream router of the computer. If this is the case, you could change the gateway IP address of the upstream router or use Method 2 to access the configuration UI.

Step 3: Log in to the router with the following information.
Default username: admin
Default password: admin

Step 4: Follow the guide and change the login password.
To change the password for the device, log in to the device > select “Modem Settings” > scroll down to “Admin Settings”

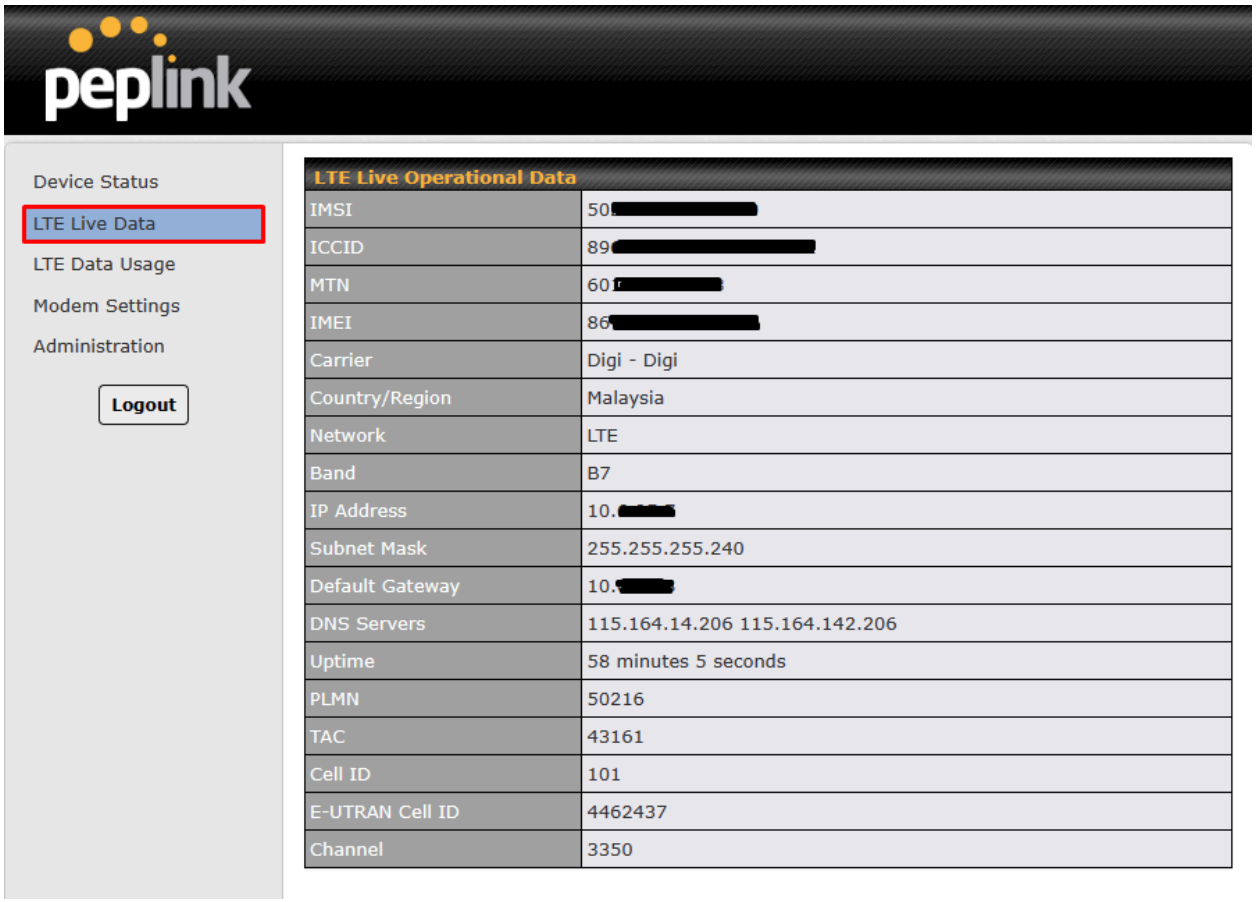
4.2 Device Status

System Information	
Device Name	This is the name specified in the Device Name field located at **Modem Settings > Admin Settings**.
Model	This shows the model name and number of this device.
Product Code	If your model uses a product code, it will appear here.
Firmware	This shows the firmware version this device is currently running.
Hardware Revision	This shows the hardware version of this device.

Serial Number	This shows the serial number of this device.
IMSI	This is the International Mobile Subscriber Identity which uniquely identifies the SIM card.
IMEI	This is the unique ID for identifying the modem in GSM/HSPA mode.
ICCID	This is a unique number assigned to a SIM card used in a cellular device.
LAN MAC	The MAC address of the device LAN.

Running Status	
Uptime	This shows the length of time since the device has been rebooted.
Current System Time	This shows the current system time.
IP Address	IPv4 address assigned by ISP.
Global IP Address	IPv6 address assigned by ISP.
Internet Connection Status	Device connection status (Connected or Disconnected).
Voice Registration Status	Indicates if the device voice function is ready for operation (Registered or Unregistered).
Power Supply Mode	Type of power supply (USB, Micro Fit or Both Micro Fit and USB).
Remote Assistance	This option is to turn on remote assistance with the time duration.

4.3 LTE Live Data



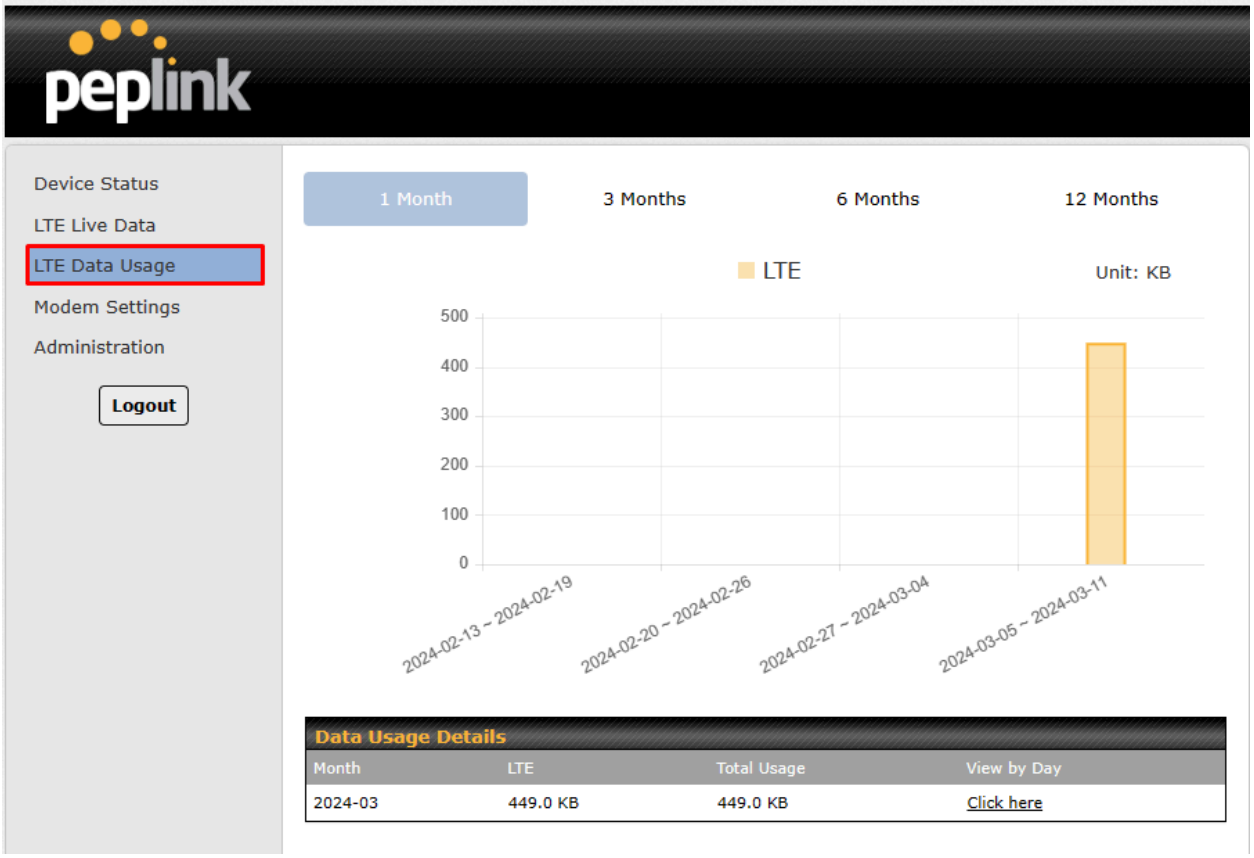
LTE Live Operational Data	
IMSI	This is the International Mobile Subscriber Identity which uniquely identifies the SIM card.
ICCID	This is a unique number assigned to a SIM card used in a cellular device.
MTN	This field is to display the mobile telephone number of the SIM card.
IMEI	This is the unique ID for identifying the modem in GSM/HSPA mode.

Carrier	The service provider of the SIM card.
Country/Region	The country of the service provider.
Network	Type of cellular network connected.
Band	Connected bands (frequencies).
IP Address	IP address assigned by ISP.
Subnet Mask	Subnet Mask of the assigned IP address.
Default Gateway	Access point between this network with ISP.
DNS Servers	IP address of DNS server connected.
Uptime	The amount of time the device connected to ISP.
PLMN	Unique identification of PLMN.
TAC	Type Allocation Code.
Cell ID	Generally unique number used to identify each base transceiver station (BTS) .
E-UTRAN Cell ID	Unique identifier assigned to each cell within the network.
Channel	Channel ID to communicate with the base station.

4.4 LTE Data Usage

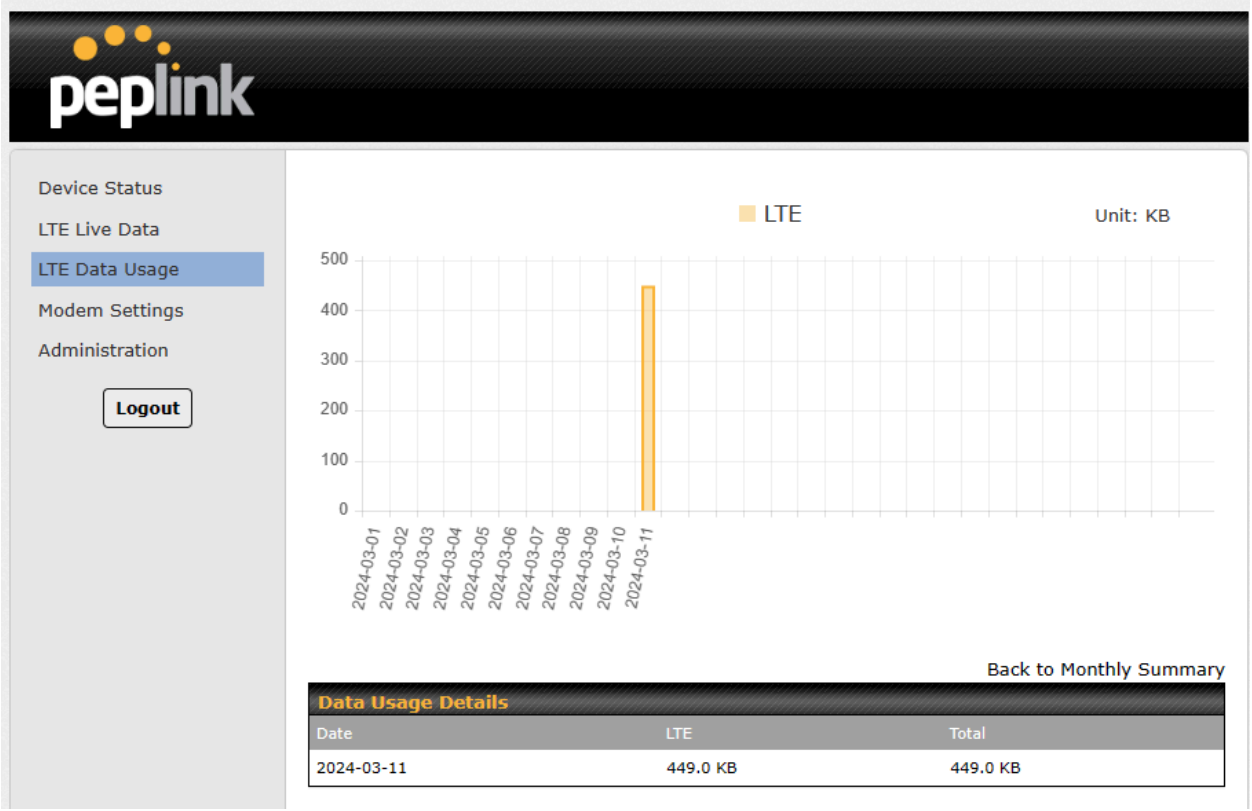
LTE Data Usage

On this page, you can view the usage of the device. The specified time frame above allows you to generate a report for the selected period.

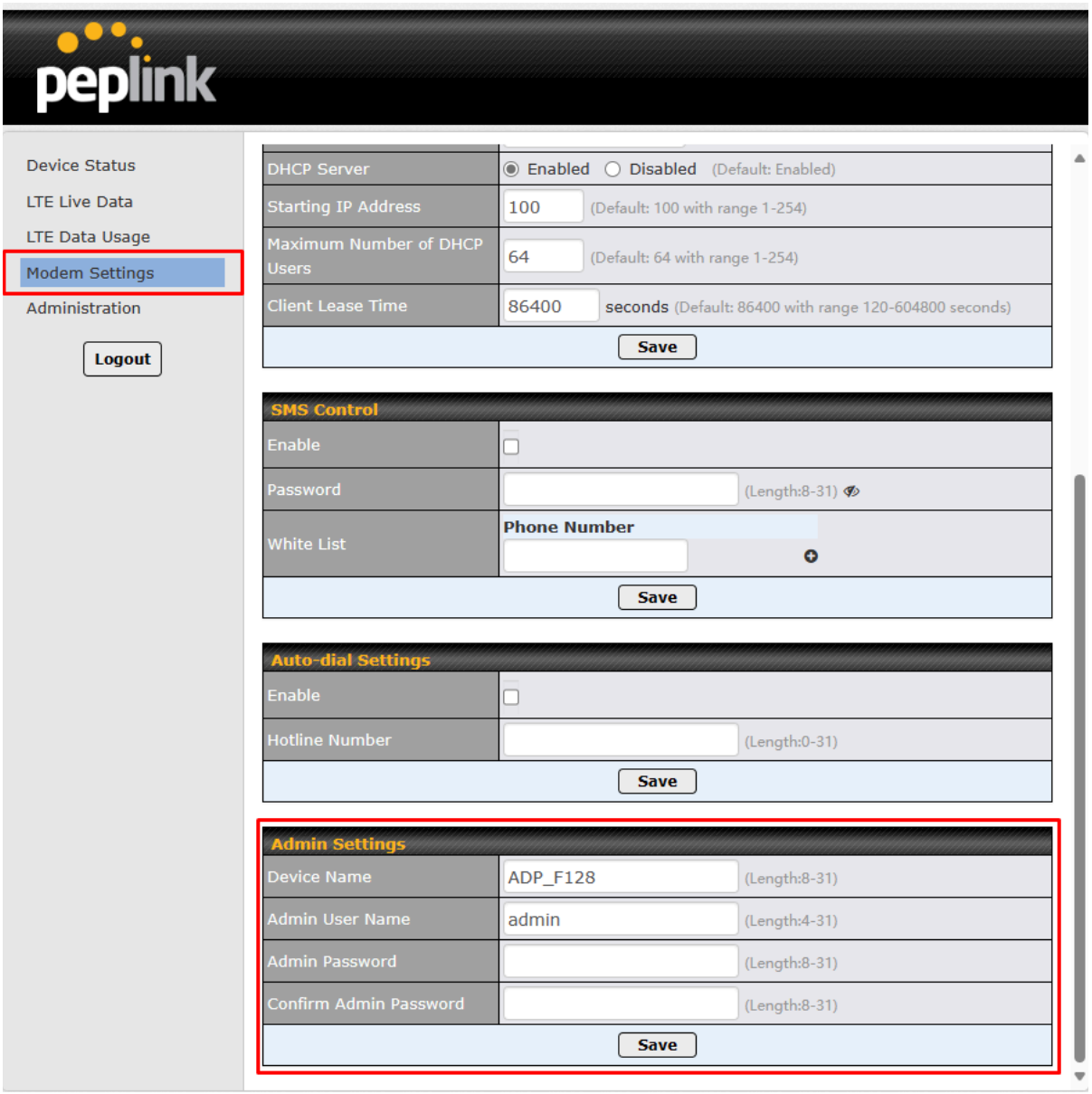


Data Usage Details

In this table, you can find additional details displaying the exact usage for the month. To view the daily usage report, you can click on **“Click here”** under **“View by Day”**.

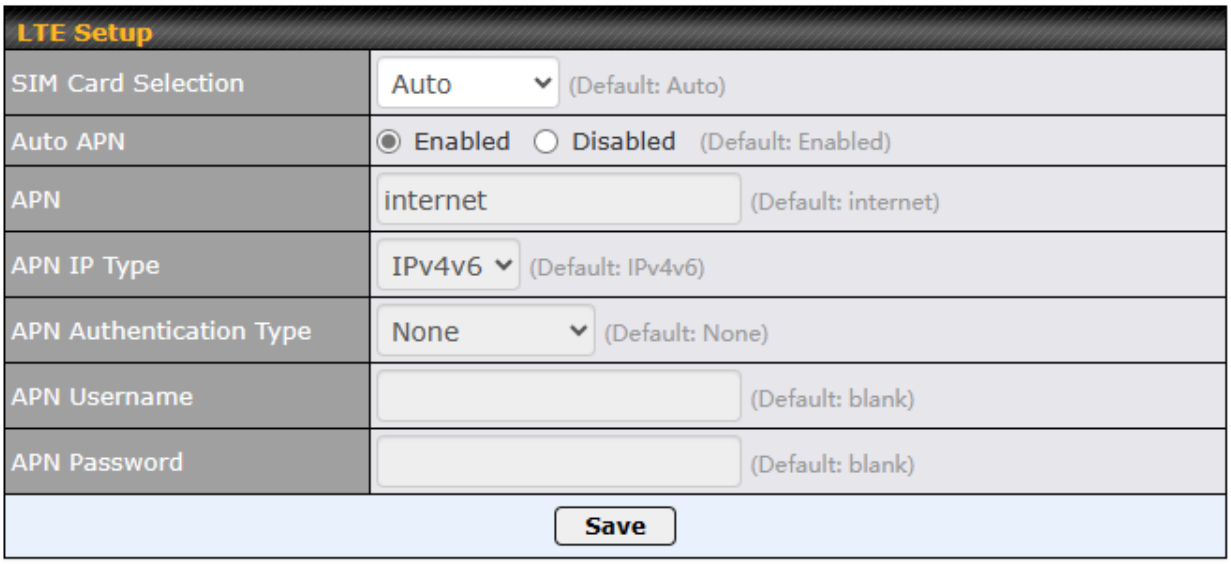


4.5 Modem Settings



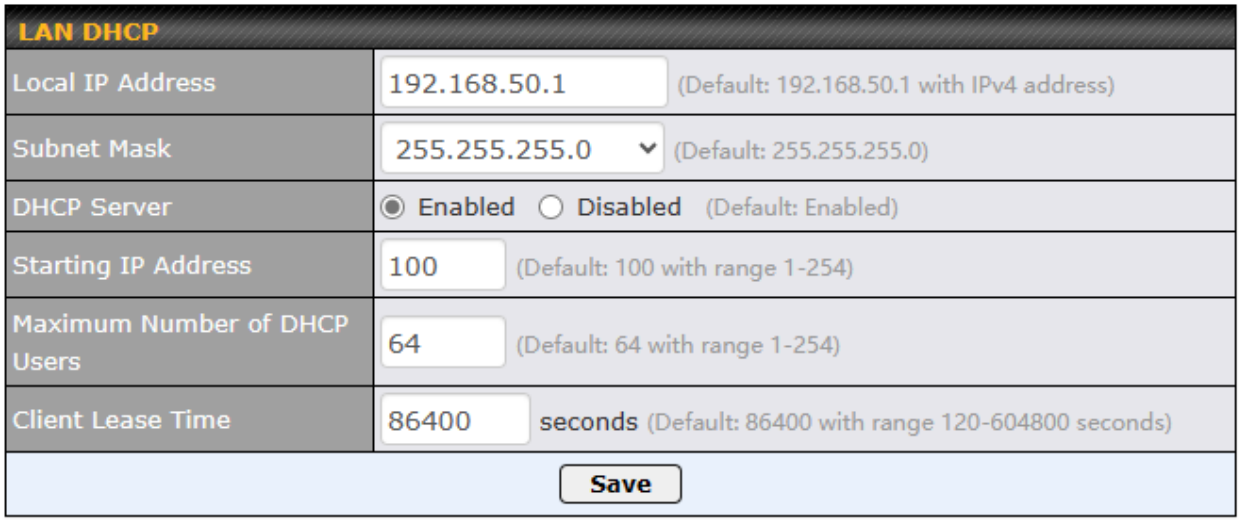
Admin Settings	
Admin User Name	Username for login to the device.
Admin Password	Password for login to the device.

Confirm Admin Password	Re-type password to ensure the password is matched.

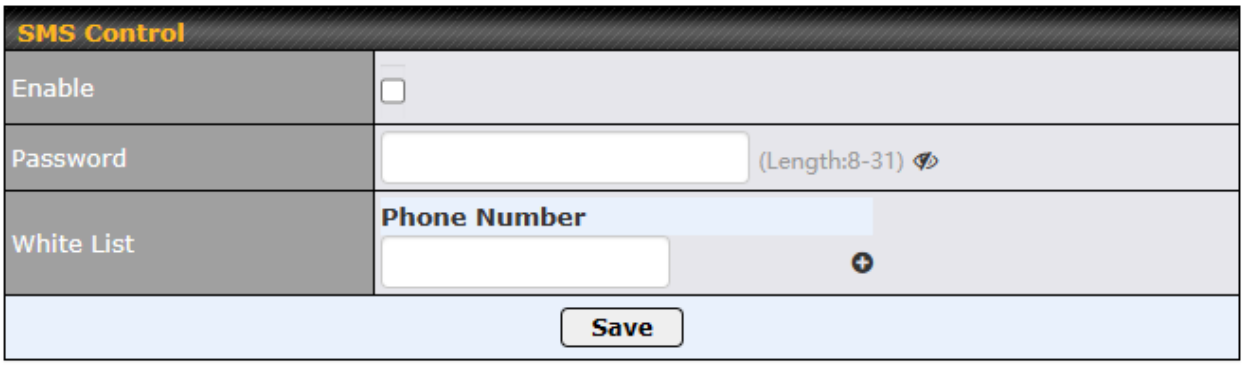


LTE Setup	
SIM Card Selection	This setting allows you to select which type of SIM Card you want to use. You may select **Nano-SIM** or **eSIM**. The default and recommended setting is Auto.
Auto APN	This setting enables you to configure the APN (Access Point Name) settings for your connection. When Auto is enabled, the APN settings should be automatically detected. The connected device will be configured, and the connection will be established automatically. If you encounter any difficulties in establishing the connection, you can choose Custom to manually enter your carrier's APN, Login, Password, and Dial Number settings. The appropriate values can be obtained from your carrier. The default and recommended setting is Auto.
APN / Username / Password	When Auto is selected, the information in these fields will be filled automatically. Select Custom to customize these parameters. The parameter values are determined by and can be obtained from the ISP.
APN IP Type	This setting enables the selection of the PDP type.

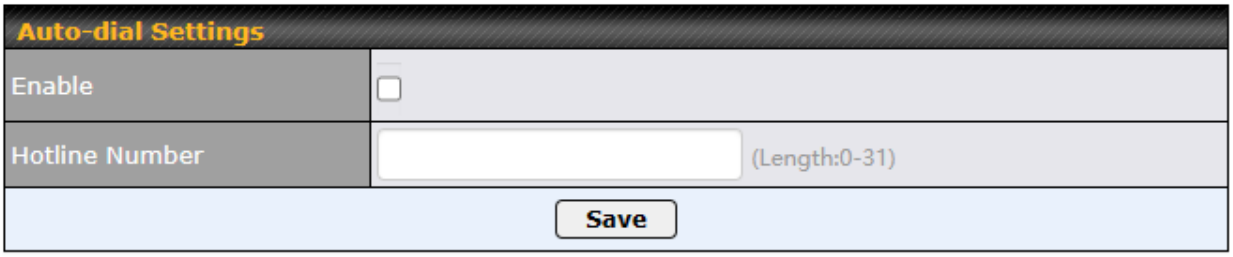
	• IPv4 • IPv6 • IPv4v6 (Dual stack)
APN Authentication Type	Choose from PAP Only or CHAP Only or Both to use those authentication methods exclusively. Select Auto to automatically choose an authentication method.



LAN DHCP	
Local IP Address	IP address of the POTS Adapter on the USB-C.
Subnet Mask	Subnet Mask of the POTS Adapter on the USB-C.
DHCP Server	When this setting is enabled, the POTS Adapter DHCP server automatically assigns an IP address to each computer that is connected via USB-C and configured to obtain an IP address via DHCP. The POTS Adapter's DHCP server can prevent IP address collisions on the USB-C.
Starting IP Address	Starting IP address to be assigned.
Maximum Number of DHCP Users	The maximum number of users can be assigned.
Client Lease Time	The amount of time before the DHCP server reclaims an IP address.

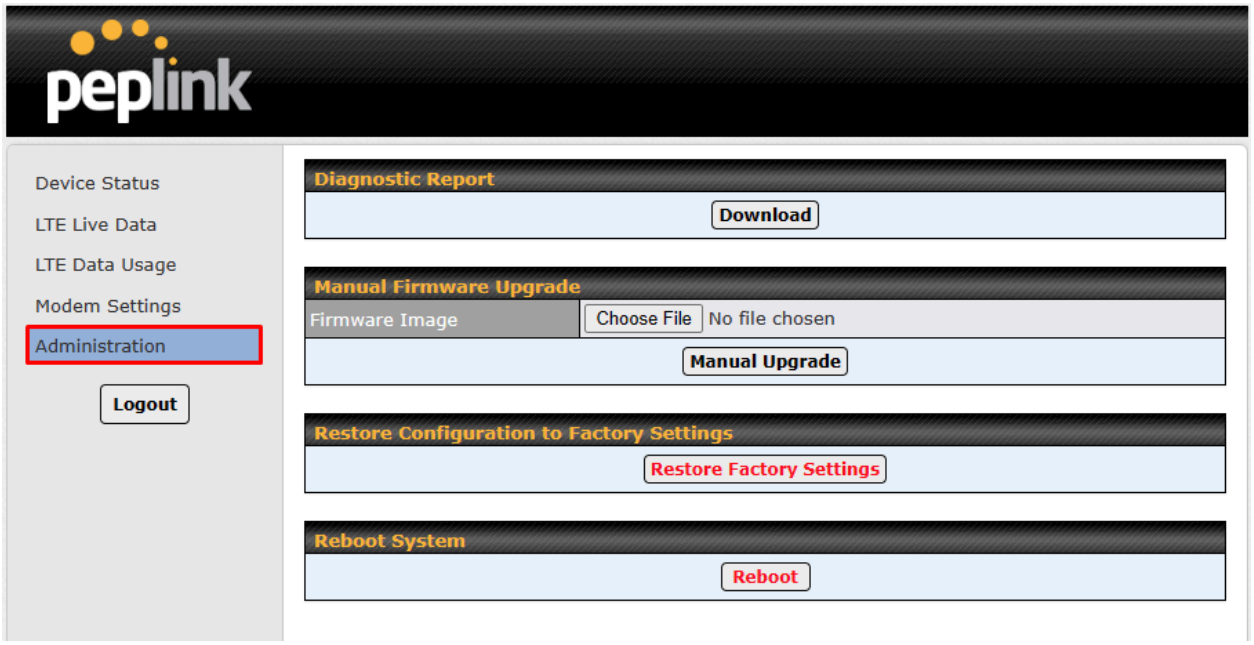


SMS Control	
Enable	Enable device control using SMS messages.
Password	Create a password which must be in each SMS sent command.
White List	Enter phone numbers which can send SMS commands.



Auto-dial Settings	
Enable	Enable auto-dial feature.
Hotline Number	Auto-dials to predefined numbers once the device goes off-hook.

4.6 Administration



Administration	
Diagnostic Report	The **Download** link is for exporting a diagnostic report file required for system investigation.
Manual Firmware Update	To update the device firmware, download a firmware file into your PC and upload it here to perform a manual download.
Restore Configuration to Factory Settings	The Restore Factory Settings button is to reset the configuration to factory default settings. After clicking the button, you will need to click the **"OK"** button on the top pop up to make the settings effective.
Reboot System	To reboot the device.

5. Declaration

FCC Requirements for Operation in the United States
Federal Communications Commission (FCC) Compliance Notice:

For POTS Adapter

Federal Communication Commission Interference Statement

Any changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

—Reorient or relocate the receiving antenna.
—Increase the separation between the equipment and receiver.
—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
—Consult the dealer or an experienced radio/TV technician for help.

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.

Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body.