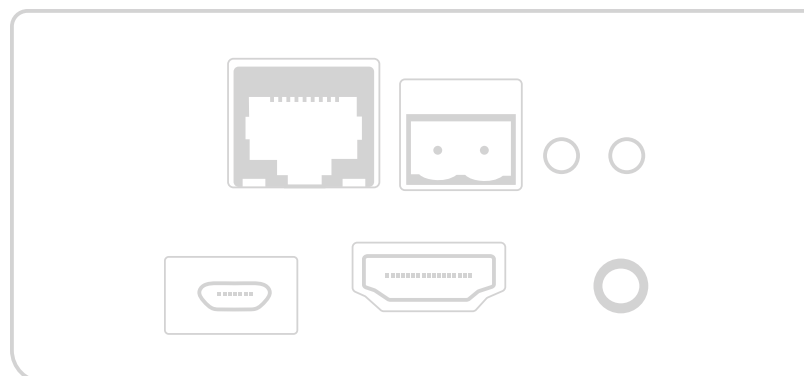


Powerlink

Installation and Operation Manual

Your complete installation guide for Powerlink



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1. Introduction

The PowerPlus Energy PowerLink module retrieves the battery performance data from LiFe and Eco PS Series batteries which have the Australian made Digital Battery Management System (BMS).

The information provided by the PowerLink module is accessible on most computers, tablets and phones via web browser. Voltage, current and battery temperature data is currently available.

The PowerPlus Energy batteries have been designed as a stand alone self managed solution, however the PowerLink module also provides information via MODBUS SNMP.

The information provided by the PowerLink module will assist in providing the optimum performance and longevity from your energy storage.



Screenshot displaying types of information accessible through the Powerlink from LiFe12033P.

2. Product Information

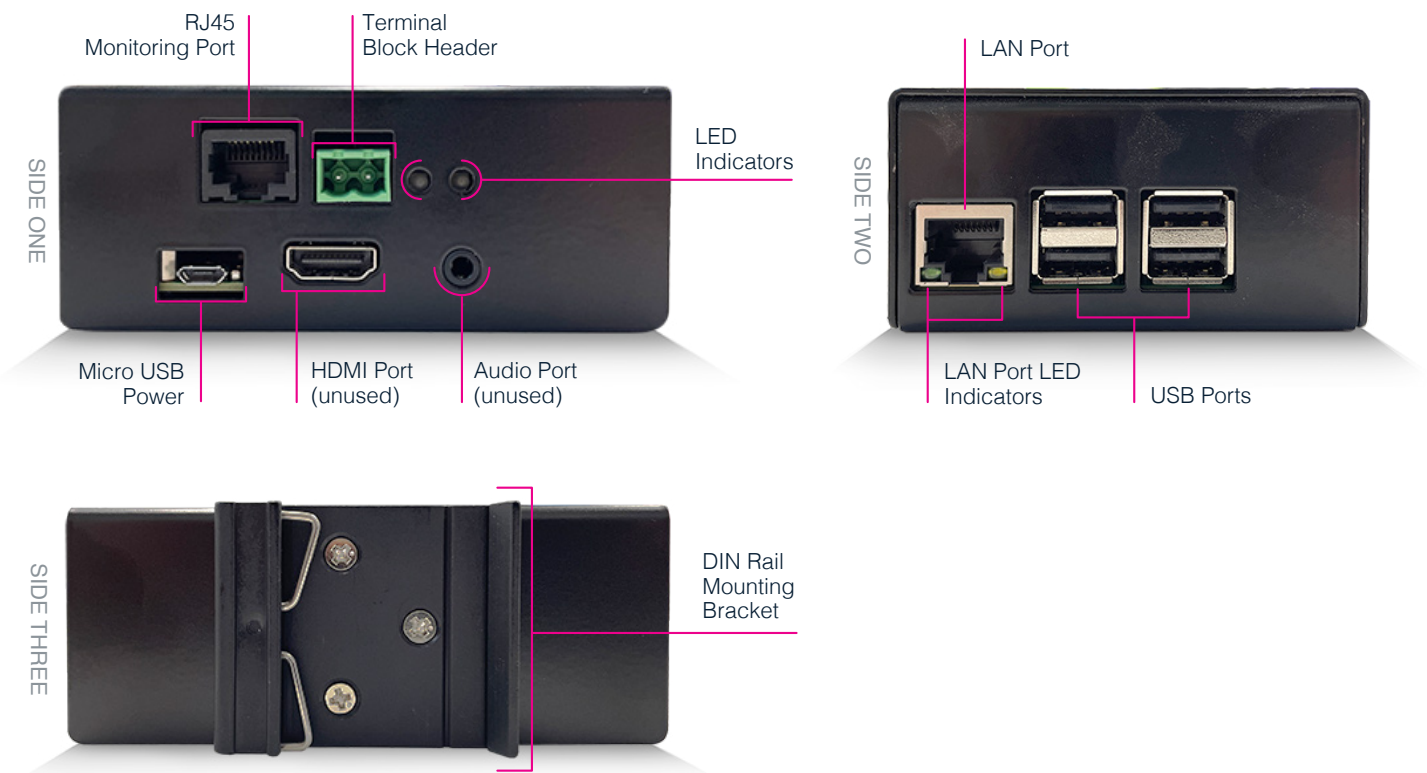
2.1 SPECIFICATIONS

Battery Connection	RS485 - Battery comms signal bus x 2 RJ45
Communications	Ethernet/ Modbus TCP-IP / Can communicate with up to 20 batteries
I/O	USB-A x 4 - Future Use/ Diagnostics
Power	5V
Power Connection	USB-Micro
Dimensions	110mm W x 110mm D x 40mm H
Weight	450G
Compatibility	LiFe4833PS, LiFe4822PS, LiFe4838PS, LiFe12033P, Eco4840PS

2.2 INCLUSIONS

2m RJ45 cable
30cm RJ45 cable
5V power supply to micro USB
RJ45 termination plug (COMLBA)

2.3 PORTS



3. Powerlink module Setup

3.1 POWERLINK SET UP

1. Connect the micro USB cable from the 5V power adaptor to the Powerlink port.
2. Connect the 5V power adaptor to the main AC power outlet and Switch it ON. The red LED will be ON.
3. Connect the cable from the LAN modem (for the internet) to the LAN port. Note: This port is next to the 4 USB ports.
4. LAN port LED indicators on the bottom will be ON.

3.2 CONNECTING TO POWERLINK

There are two ways to access the PowerLink Installation and Setting Webpage UI.

Functionality remains the same for both methods,

Over the LAN that the Powerlink is connected to through your modem, router or network switch

or

Using the PowerLink onboard WiFi hotspot

though the steps to activate your Powerlink will change slightly for each.

3.3 ESTABLISHING LAN CONNECTION

1. Open a browser on a device connected to the same network as the Powerlink.
2. Navigate to ***http://powerlink-XXXX*** where XXXX is the 4 digits of the serial number located on the barcode sticker on the PowerLink device.
3. If this is the first time the Powerlink has been configured, you will be taken directly to the Installation page.

3.4 ESTABLISHING WIFI CONNECTION

1. Once Connected to power the PowerLink will output a WiFi signal with the name: "PowerLink-XXXX" where XXXX is the 4 digits of the serial number located on the barcode sticker on the PowerLink device.
2. Open the WiFi settings on the device you want use for configuration and connect to this network.
3. The password for the Access Point will be "PL1234XXXX" where, as above XXXX is the 4 digits of the serial number located on the barcode sticker on the PowerLink device.
4. Once connected, open a browser, and navigate to "192.168.254.254".
5. If this is the first time the Powerlink has been configured, you will be taken directly to the Installation page.

3.5 MONITORING PLATFORM ACCESS

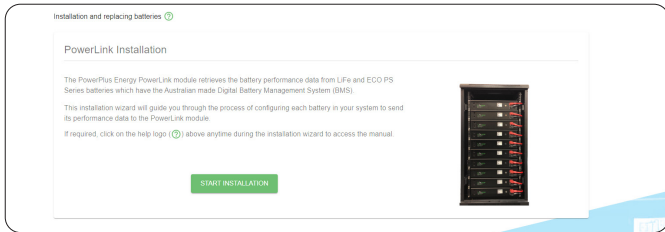
To grant user access the Powerlink monitoring platform, email support@powerplus-energy.com.au. In this request please include details of the persons requesting access, along with contact details, and appropriate authorisation.

4. Battery Installation Procedure

Once you have access to the installation page for the PowerLink you will need to add site information and install the batteries before any polling can occur. The following steps will guide you through the installation process.

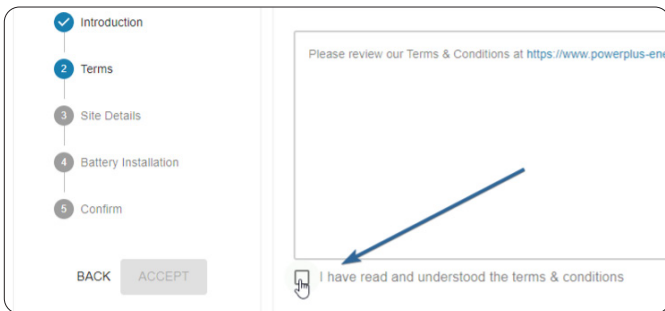
4.1 START INSTALLATION

From the main page of the installer click “Start Installation”



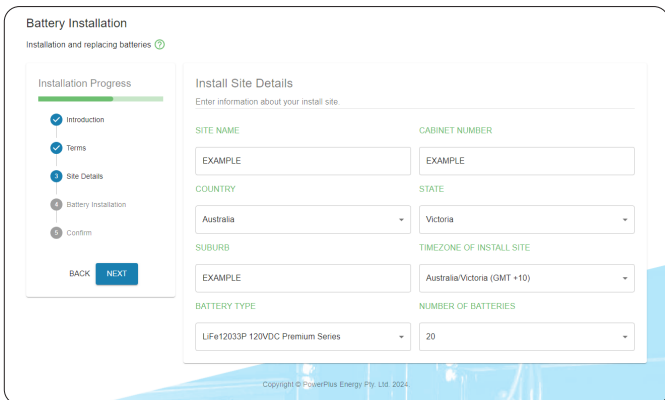
4.2 TERMS AND CONDITIONS

Read the Terms and Conditions, click “I have read and understood the terms & conditions” box, then “Accept” to continue



4.3 INSTALLATION SITE DETAILS

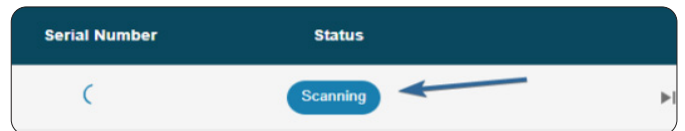
Enter installation site details, taking special care to set the battery type and number as this is critical information. Once this is completed click “Next”.



4.4 SCANNING BATTERIES

On the next page you will be prompted to scan in the batteries, prior to scanning in the batteries you will need to do the following:

1. Remove any data cables connecting the batteries from the ports on the left-hand side of the battery.
2. Turn on the circuit breakers of the batteries (if they are not already) and wait for the Status LED (located between the breaker and the Amphenol connectors) to turn solid blue.
3. Connect the RS485/RJ45 cable into the RJ45 Monitoring Port located on side 1 of the PowerLink device to the first battery to be scanned. Please note that batteries **MUST** be scanned from top to bottom, and left to right if there are multiple racks per unit.
4. Once this is done click the “Start Scanning” button and then “start” on the conformation popup. You will see the PowerLink start to scan for batteries.



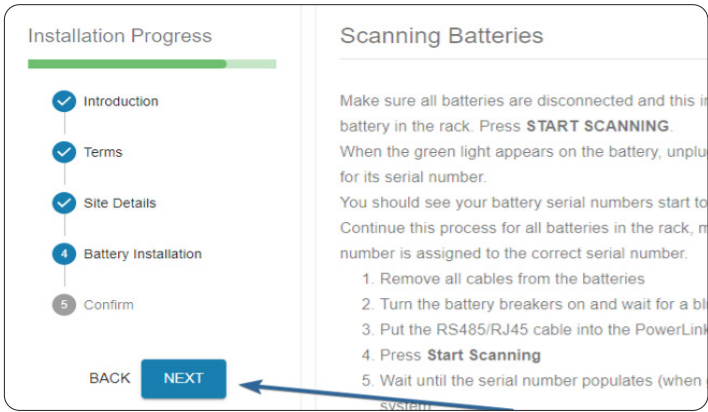
5. Once the position and status indicators change from blue to green you are ready to move onto the next battery.



6. Connect the RJ45 cable end to the next battery needing to be scanned.
7. Press Scan in the Battery management screen and after couple of seconds, you will see battery (BMS) serial number as in the picture.
8. One at a time, repeat the steps 4 to 6 for every other battery.

4.4 SCANNING BATTERIES (CONTINUED)

9. Confirm the number of serial numbers is same as number of batteries in the battery rack.
10. Once confirmed, click next to continue.



4.5 CABLING

1. Replace the cable in the RJ45 Monitoring Port with a suitable length RJ45 cable to connect into the top battery.
2. Connect the other end to top battery in the rack.
3. Connect another small RJ45 cable to the remaining port in the same battery.
4. Connect the other end into next battery (daisy chain).
5. Repeat the daisy chain connection till last battery.
6. Connect the RJ45 termination connector “COMLBA” in the remaining slot on the last battery.
7. Click “Finish” to finalize the installation process.
8. After 1-2 minutes, go to MultiStat (available on the home page).
9. Verify that all the batteries are responding.

Rack Position	Serial #	Installed	Last Seen	Status
1	300001	09-Feb-2023 15:54:07	09-Feb-2023 15:54:07	Polling
2	300002	09-Feb-2023 15:54:09	09-Feb-2023 15:54:09	Polling

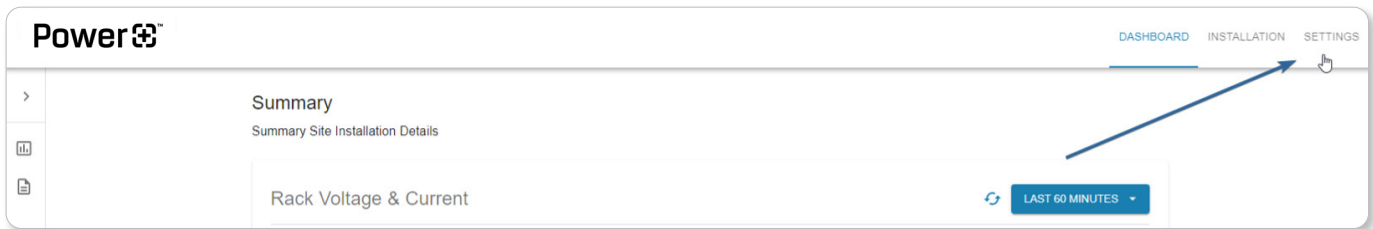
10. If you are not able to see the battery status in MultiStat window, press Restart polling button in configuration page and repeat step 6 to 8.

5. Updating Network Settings

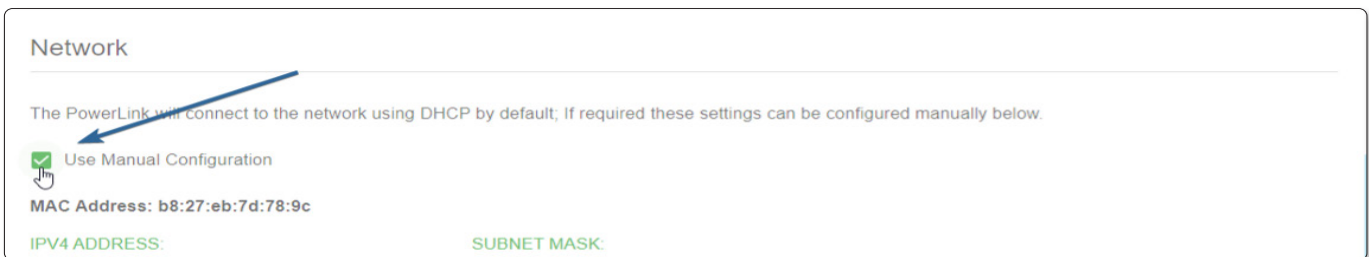
5.1 MANUAL NETWORK CONFIGURATION

By default, the Powerlink will connect to the network using DHCP, If required, the Powerlink can be configured manually for your network. Follow the steps below to configure.

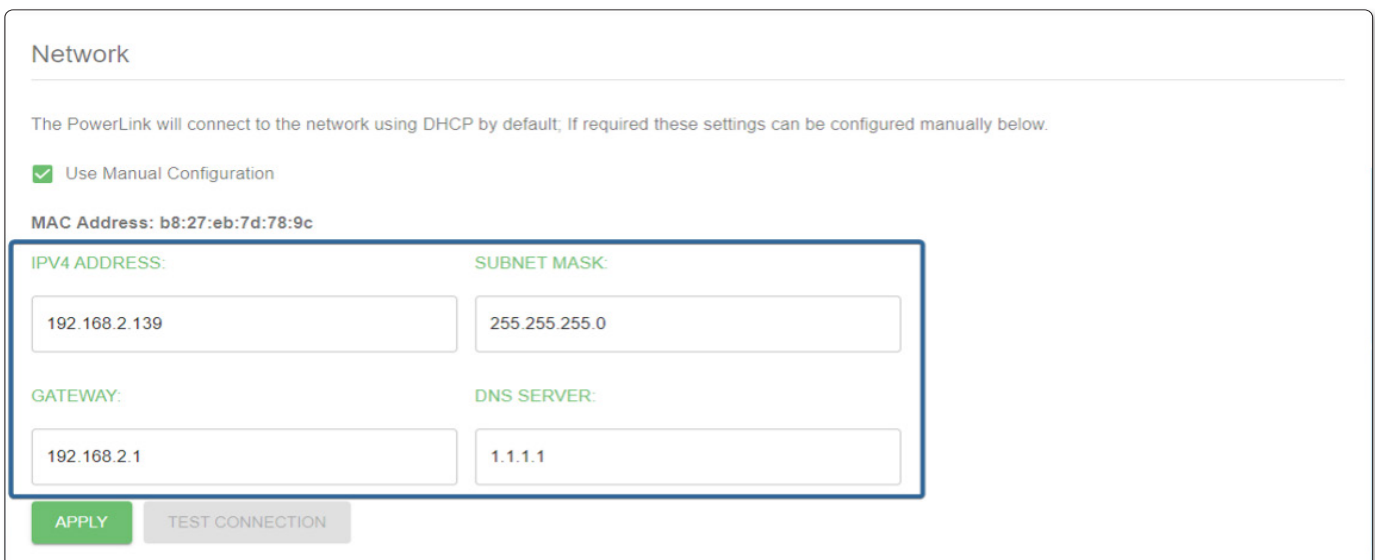
1. From the main dashboard of the PowerLink interface, click on the settings tab in the top right corner.



2. On the settings page scroll down to the “Network” tab. If you want to change the Powerlink to a manually assigned IP address you will need to click the “Use Manual Configuration” check box.



3. You will then be able to enter the required networking information into the boxes below.



5.1 MANUAL NETWORK CONFIGURATION (CONTINUED)

- Once this is done, click the “Apply” button, you will then be prompted to approve the change again.

Network

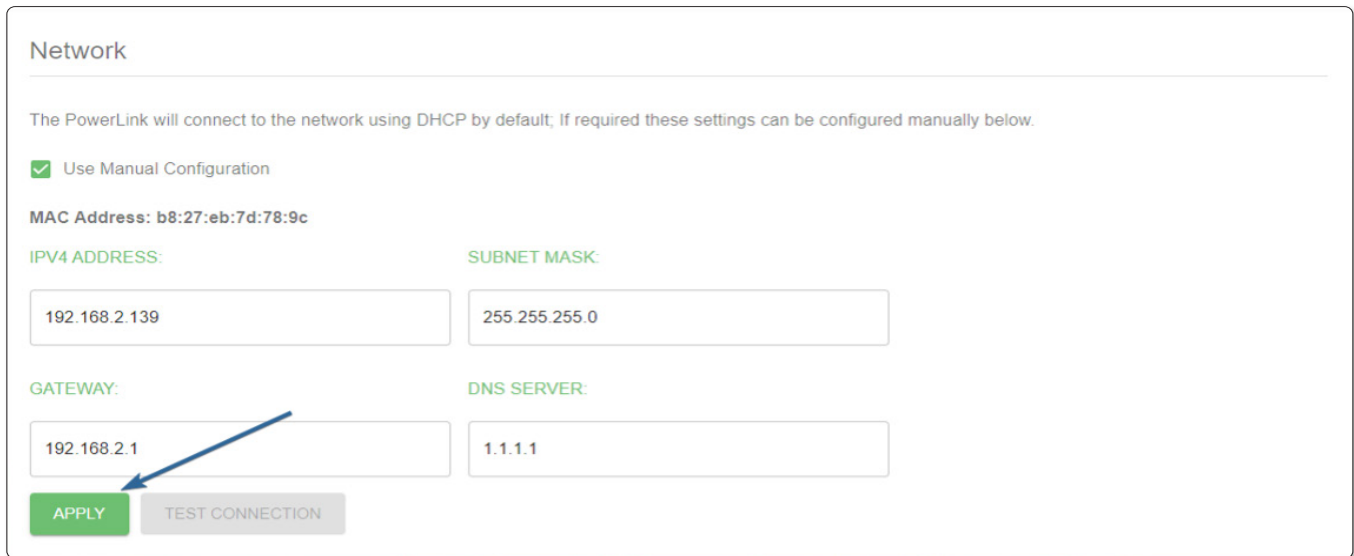
The PowerLink will connect to the network using DHCP by default, if required these settings can be configured manually below.

Use Manual Configuration

MAC Address: b8:27:eb:7d:78:9c

IPV4 ADDRESS: SUBNET MASK:

GATEWAY: DNS SERVER:



- Once the change has completed the “Test Connection” button will appear in blue, click this to confirm that the new settings are able to access the internet.

Network

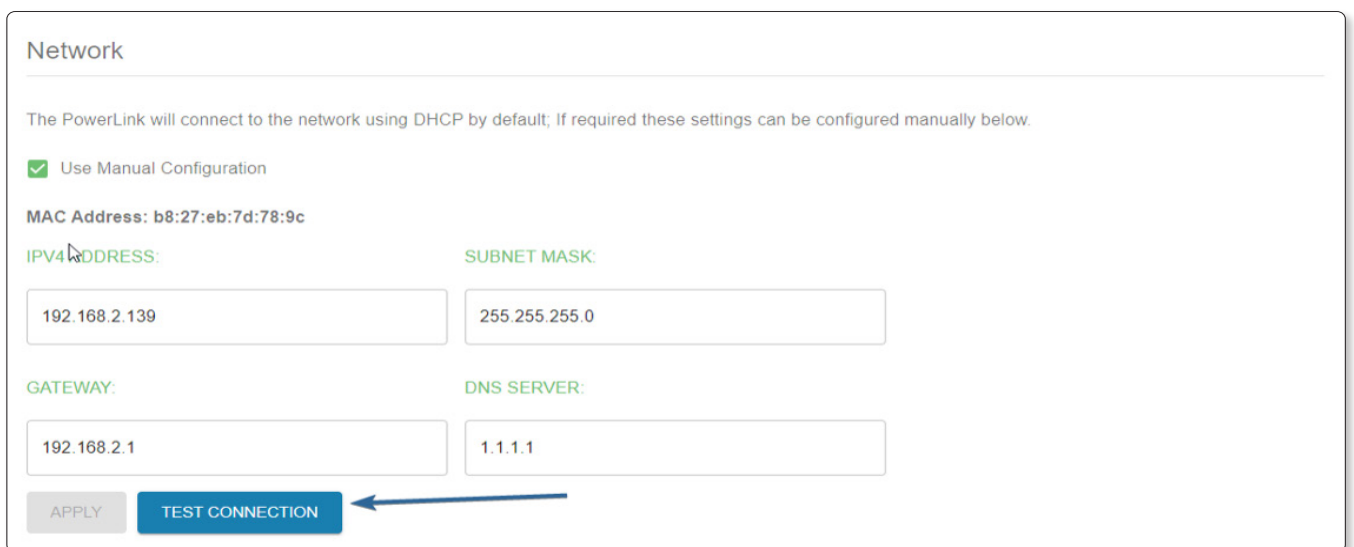
The PowerLink will connect to the network using DHCP by default, if required these settings can be configured manually below.

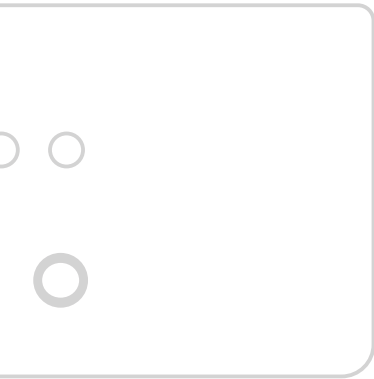
Use Manual Configuration

MAC Address: b8:27:eb:7d:78:9c

IPV4 ADDRESS: SUBNET MASK:

GATEWAY: DNS SERVER:





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