Gallagher
SMB Kit + Permaconn PM54

Installation Note

Introduction

This document describes how to install the Permaconn PM54 within the Gallagher SMB Kit. Detailed installation instructions specific to the Permaconn PM54 can be viewed [here](#).

The Permaconn PM54 is a high-speed internet router that provides 4G fallback if the site's internet connection fails. It is ideal for sites where the fixed network is unreliable. The Permaconn PM54 can also function as an alarm communicator, transmitting alarms from the Gallagher SMB Controller to a monitoring station using the Contact ID alarms transmission protocol. The Permaconn PM54 is powered by the Gallagher SMB Kit and provides connection to the site's WAN or Wi-Fi.

Installation

The recommended antenna location is above the cabinet. Create the knockout needed for the 4G antenna and cable. Ensure nothing is obstructing the antenna and there is a decent amount of space above (you may need to test the range). If connecting the Gallagher SMB Kit to the site's Wi-Fi, locate the Wi-Fi antenna above the cabinet. Fix the PM54 to the inside of the cabinet wall. The PM54 has a magnetic base, so it can easily be attached to the cabinet wall.
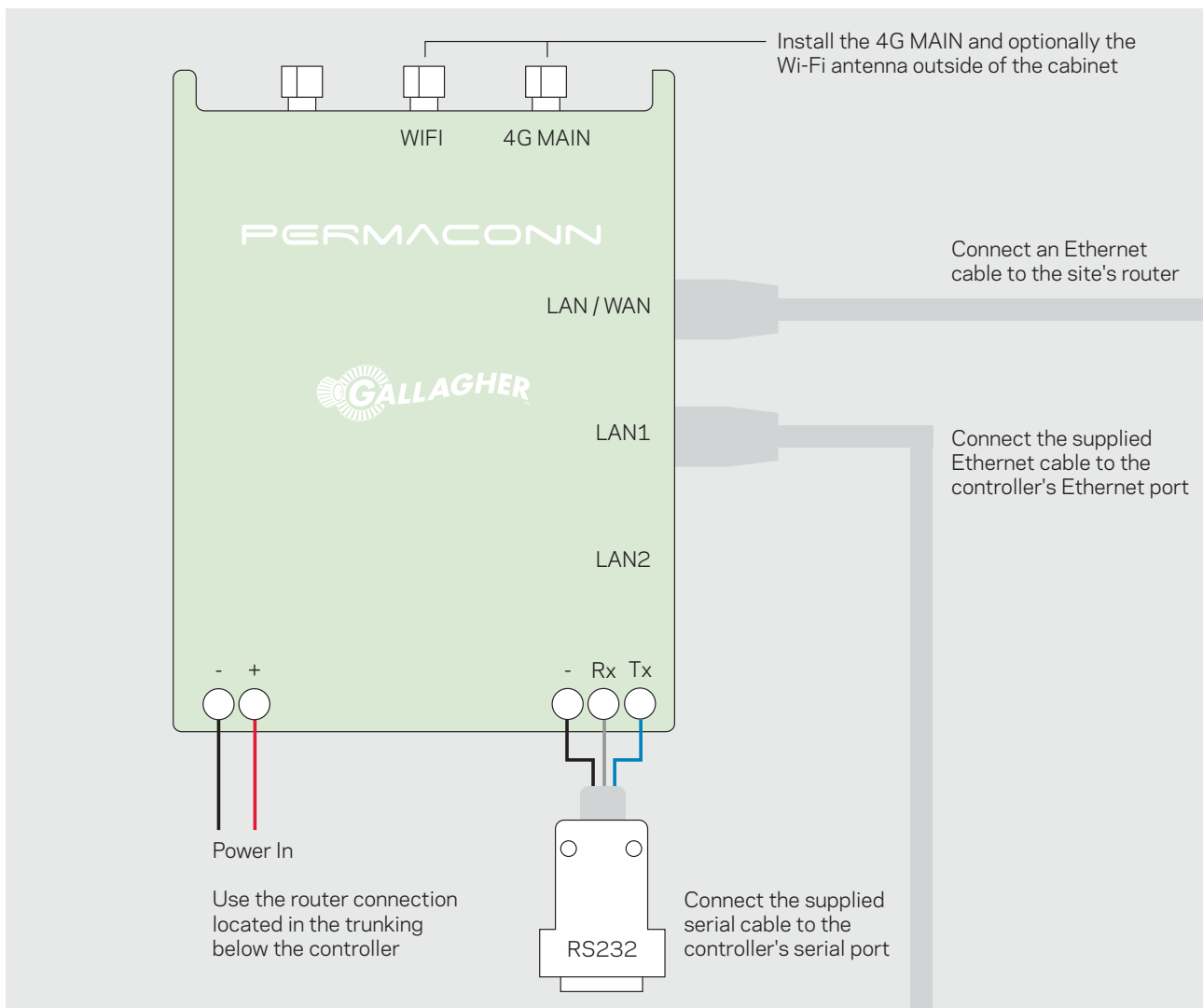
Connection to the customer's network

To connect the PM54 to the customer's network, perform the following procedure:

1. Connect the 4G antenna to the 4G MAIN connector.

2. Connect power to the PM54. Use the connection in the trunking below the controller.

3. Ping the device in the Atlas Portal https://admin.permaconn.com/

4. To connect to the customer's WAN:

   ▪ Connect an Ethernet cable from the PM54 WAN port to the customer's network.

   ▪ Navigate to the IP tab then select WAN from the left navigation list.

   ▪ Tick Enable WAN Connection. Select Ethernet Cable as the Physical Type and DHCP as the Connection Type. Select Save then Restart Device.

5. To connect to the customer's Wi-Fi:

   ▪ Connect the Wi-Fi antenna to the PM54 and locate above the cabinet.

   ▪ Navigate to the IP tab then select WAN from the left navigation list.

   ▪ Tick Enable WAN Connection. Select Wi-Fi STA as the Physical Type. Enter the Client Mode Settings and DHCP as the Connection Type. Select Save then Restart Device.

Ensure the following ports are open on the customer's network for the PM54:

New Zealand

Port	Protocol
11443	TCP
55572	UDP
55531	UDP
59681	UDP

Australia

Port	Protocol
11443	TCP
55300	UDP
55530	UDP
59681	UDP

Ensure the following ports are open on the customer's network for the controller:

Port	Protocol	Details
67	UDP	DHCP to internal router
53	UDP	DNS to internal router
123	UDP	NTP to time.google.com
443	TCP	SMB Cloud HTTPS

The PM54 may take up to 3 minutes to come online. If the cellular signal strength is low you will need to reposition the antenna. To verify signal strength Ping the PM54 using the Atlas portal. Signal strength must be better than -94dBm for reliable communications.

Router activation

To use the PM54 as a cellular router, perform the following procedure:

1. Log into the Atlas Portal https://admin.permaconn.com/

2. Select the **Fleet** tab then **Activate**.
    The 'Device Activation' screen displays.

3. Enter the PM54 serial number (located on the rear of the unit).
    The 'PM 54v2 Activation' screen displays.

4. Complete the following fields:

Field	Description
Usage Mode	Select **Router**
Name	Enter the site's **Name**

5. Select **Next**.
    The wizard navigates to the next screen.

6. Select **Activate** then **OK**.

Alarm communicator activation

To send an activation request to your monitoring station, perform the following procedure. Alternatively, call your monitoring station and request they activate the unit.

1. Log into the Atlas Portal https://admin.permaconn.com/

2. Select the **Fleet** tab then **Activate**.
   The 'Device Activation' screen displays.

3. Enter the PM54 serial number (located on the rear of the unit).
   The 'PM 54v2 Activation' screen displays.

4. Complete the following fields:

Field	Description
Central Station	Select the alarm monitoring station that will monitor the site
Usage Mode	Select **Alarm Communicator**
Poll Plan	Select a **Single SIM** plan for New Zealand
	Select a **Dual SIM** plan for Australia
Name	Enter the site's **Name**

5. Select **Next**.
   The wizard navigates to the next screen.

PM 54v2 Activation

Activation Summary

Serial Number:	500450
Name:	Sample Site
Control Room:	Nelson Alarms - Security Systems Ltd
Bureau:	Gallagher
Usage Mode:	Alarm Communicator
Poll Plan:	P3 [4h SG IP]
Data Pack:	-

Device Options

☐ Enable Fix Account

Interface Type: Gallagher ⌄

Signatory

Sample Technician

[Back] [Activate]

6. Enter the **Account Number** for the site.

7. Select **Activate** then **OK**.

8. Confirm with control room that alarm events are being received.

Confirm primary connection

Check to confirm the primary connection method is the WAN/Wi-Fi. **Ping** the device in Atlas. Navigate to the **IP** tab then select **Overview** from the left navigation list.

Connection to the internet is indicated by the **IP** LED (Green = Steady On).
Connection to the cellular network is indicated by the **MOBILE** LED (Green = Steady On).