Cloud Managed, 802.3at PoE Switch

Quick Start Guide

WI-PCMS310GF

8GE + 2 SFP

Layer 2 Cloud Managed 802.3at PoE Switch Quick Start Guide

V2212

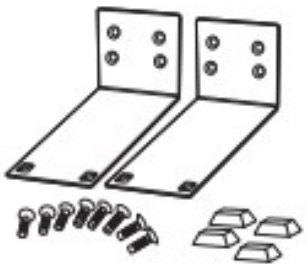
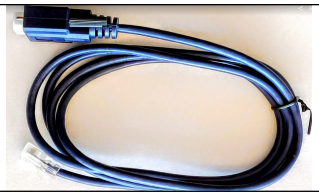
Table of Contents

1. Introduction

The **WI-PCMS310GF** is a Managed, Layer 2 (L2), POE 802.3at (48V/30W per port) IP Switch, with Gigabit Ethernet (GbE), Small Form-factor Pluggable (SFP), and serial Console interfaces.

This document supplements the **Quick Installation Guide** available for download from:
https://ubwh.com.au/documents/PCMS310GF/QIG.pdf

2. Package Contents

<table>
<tr><td colspan="2"> 
</td></tr>
<tr><td colspan="2">WI-PCMS310GF</td></tr>
<tr><td> 
</td><td>  </td></tr>
<tr><td>Quick Start Guide</td><td>19″ Rack Kit</td></tr>
<tr><td>  </td><td>  </td></tr>
<tr><td>Console Cable</td><td>Power Cord</td></tr>
</table>

3. System Requirements

Web Browser: e.g. Mozilla Firefox, Google Chrome, Safari, Microsoft Edge, or Microsoft Internet Explorer.

4. LEDs

4.1 System LEDs

LED	State	Status
SYS	Blinking (slow)	Normal Operation
PWR	On	Steady on if power applied

4.2 RJ45 LEDs

LED	State	Status
PoE	Off	No Power applied
	Orange	48 V PoE applied
Link	Green	10/100/1000 Mbps connection. Flashes with activity.
	Off	No Ethernet connection

4.3 SFP LEDs

LED	State	Status
9 10	Off	No link
	Green	Link established at 1000 Mbps (1 Gbps) Flashing Indicates Activity

5. Front Panel

Port	Description
Note	Active PoE means a device is connected, and PoE voltage is applied.
RJ45 1-8	LAN: 10/100/1000 Mbps Ethernet connection PoE Out. 2-Pair, Pins: 48V= 1,2(**-**) 3,6 (+) (Ports 1-4) 1,2(+) 3,6 (**-**) (Ports 5-8) Software selectable: • Off • 48 V Active 803.3at 32 W max • 48V Forced On
SFP 9-10	Hot-swappable Small Form-factor Pluggable (SFP) ports supporting 1 Gbps connections.
Console	This port is compatible with Cisco part number 72-3383-01 (Console Cable). The serial settings are: Baud rate: 9600 Data bits: 8 Stop bits: 1 Parity: None Flow control: None

RESET	Button to the left of the PWR LED. To reset the Switch to factory defaults: The Switch should be running after bootup is complete and the SYS LED is blinking. Press and hold the **Reset** button until the SYS LED starts flashing rapidly. Release the **Reset** button.

6. Configuration

This section covers some tasks that are not fully covered in the Quick Installation Guide (see section Introduction, page 3).

6.1 Accessing the Configuration Interface

There are numerous configuration options:

1. Graphical User Interface (GUI), using an Ethernet connection.
2. Command Line Interface (CLI),
   using a console cable, or SSH[1] terminal
3. Cloud Management server.
4. SNMP Manager

[1] https://en.wikipedia.org/wiki/Secure_Shell

6.1.1. Graphical User Interface (WebGUI)

When in Factory Reset state, the Switch is set to use DHCP to acquire an IP address from the local DHCP server. If there is no DHCP server, the default IP address is **192.168.0.1**.

Please consult this manual:

https://ubwh.com.au/documents/Wi-Tek%20Cloud%20Managed%20Switches%20WEB%20User%20Manual.pdf

6.1.2. Command Line Interface (CLI)

Please consult this manual:

https://ubwh.com.au/documents/Wi-Tek%20Cloud%20Managed%20Switches%20CLI_User%20Manual.pdf

6.1.3. Cloud Management Server

Please consult this document:

https://ubwh.com.au/documents/Wi-Tek%20Cloud%20Getting%20Started%20Guide%20-%20Switches.pdf

6.1.4. SNMP Manager

There are many Network Management software platforms that can be used to monitor & control SNMP enabled devices.

Shown below is an example of using the free, open-source **HomeAssistant**[2] platform to monitor & control a PCMS310GF.

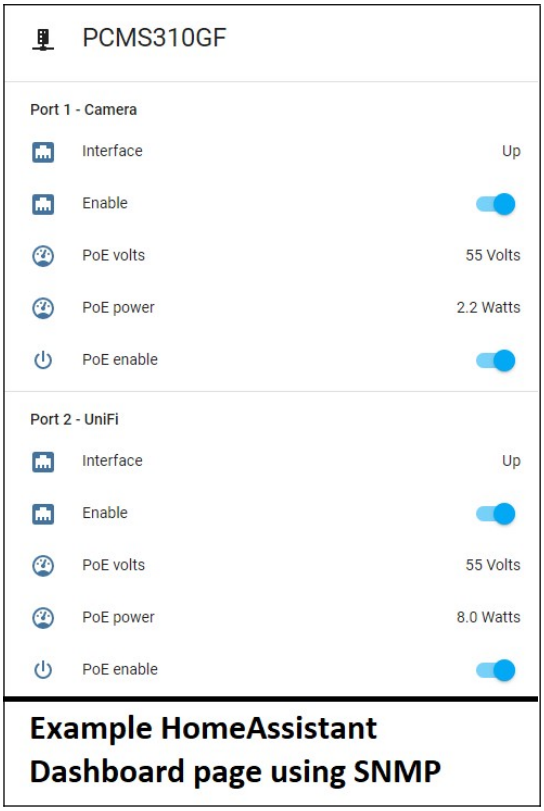


Figure 1 - Home Assistant Dashboard

[2] https://www.home-assistant.io/

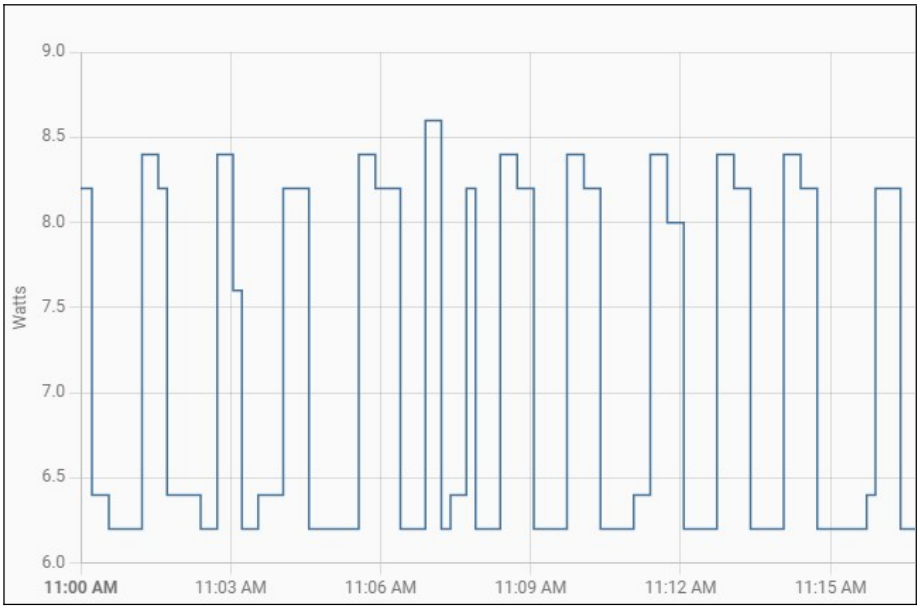


Figure 2 - HomeAssistant logs values over time. Shown here is Port 2 PoE power

To learn how to integrate one of these switches into **HomeAssistant**, see:

https://ubwh.com.au/WI-PMCS310GF

And scroll down to the ***Home Assistant (HA) Managed*** section.

6.2 SNMP and MIBs

The Switch supports the Simple Network Management Protocol (SNMP: V2c and V3). The Management Information Base (MIB) definition files are available from:
https://ubwh.com.au/documents/WiTek-MIBs.zip

Shown below are some example screen captures from a Windows program called ***PowerSNMP Free Manager*** available from https://www.dart.com/pages/powersnmp-free-manager

Device Address	Variable/IID	Value
Variable Watches		
10.1.1.38:161	hardwareVersion (1.3.6.1.4.1.59402...	V4
10.1.1.38:161	softwareVersion (1.3.6.1.4.1.59402....	WI-PCMS310GF_V10221025
10.1.1.38:161	sysName (1.3.6.1.2.1.1.5.0)	Cloud PoE Switch
10.1.1.38:161	sysDescr (1.3.6.1.2.1.1.1.0)	8GE-2GEF

Figure 3 - Basic SNMP queries

portPoeTable

poeIfInd...	poeExist	poeAdmin	operSta...	poePower	poeCurr...	poeVolt...	poeClass
1	1	1	0	0	0	55	0
2	1	1	1	8400	161	55	3
3	1	1	0	0	0	55	0
4	1	1	0	0	0	55	0
5	1	1	0	0	0	55	0
6	1	1	0	0	0	55	0
7	1	1	0	0	0	55	0
8	1	1	1	2400	46	55	4

Figure 4 PoE Table Query

7. Firmware Update

Firmware updates are available from:
https://www.wireless-tek.com/search.php?type=2
See the **Firmware** section

If there is no firmware there for your product, that means there have been no firmware updates.

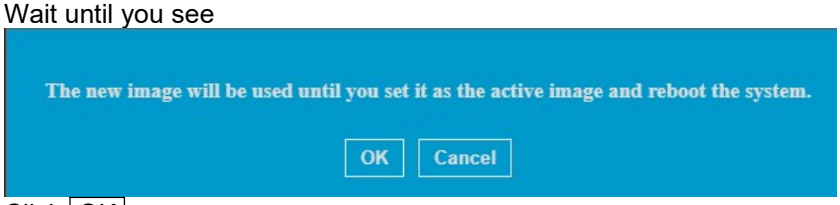
7.1 Update using GUI

1. Open the WebGUI and navigate to

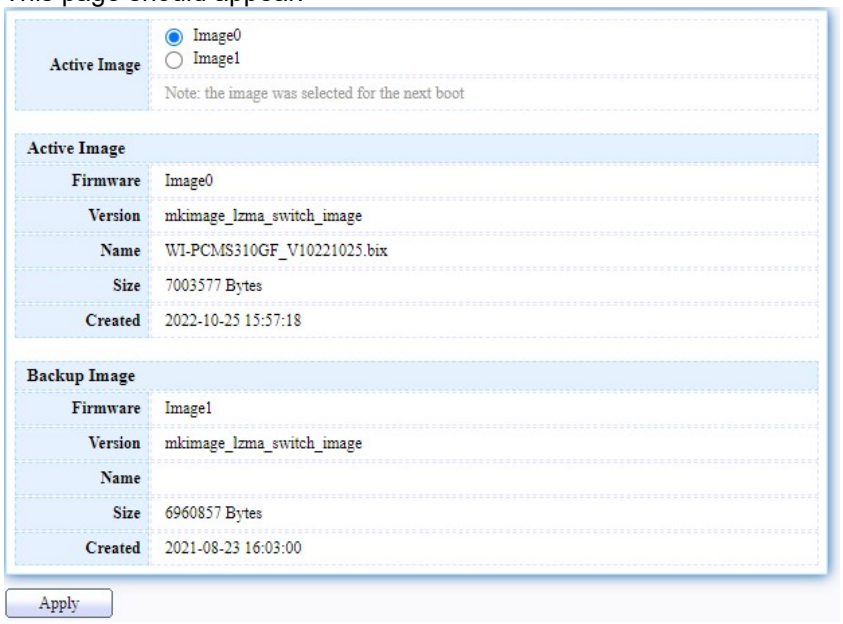

2. Choose
   a. Action = Upgrade
   b. Method = HTTP

3. Choose the *.bix file containing the new firmware

4. Click Apply

5. Wait until you see


Click OK

6. This page should appear.


Click Apply

7. Click Reboot (top-right corner)


7.2 Update using TFTP

1. Open the WebGUI and navigate to

2. Choose
    a. Action = Upgrade
    a. Method = TFTP

3. Install the *.bix file on a TFTP server

4. Enter the TFTP server network address & the file name

8. Click Apply.