

## Scanning and Registering with an AP

This guide provides instructions on how to initiate scanning and registration between ePMP Stations and Access Points.

## Scanning and Registering to an AP

ePMP stations are preconfigured from the factory to initiate scanning of all supported frequencies for 20MHz channel bandwidth right after initialization of the device is complete. The most obvious visual indication that an ePMP station has started the scanning procedure is the sequential flashing of the RF LEDs. As results from the scanning procedure are available, the ePMP station will display those results in the ePMP GUI. To have access to those results, follow the steps below:

1. Start your web browser on a computer connected to the ePMP station and connect to the its default ip address (192.168.0.2). Login to the ePMP GUI as "Admin".

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Cambium Networks	ePMP Station		admin	Password	LOGIN 🚱 [ 💽 ^
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		Cantium Support   So	Rware Version: 1.1.6.RC5   ©Cop	right 2013 Cambium Retv	vorks, AB Rights Reserved. 📿
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2. Once logged in, select "MONITOR" button and go to the "Wireless Status" section of that page. At the bottom of that page, the "Available AP List" table will contain a listing of all the APs that the ePMP station was able to detect during the scanning process. For each AP, the table includes relevant information such as AP SSID, channel frequency, received signal strength and security mode, to assist in the process of selecting an AP for this station.

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Cambium	Networks   🏫 ePMP Station	Administrator				ତ 💽 ግ 🖻 🛛	) E (
\$	CONFIGURE		F	TOOLS	-Å	QUICK START	
Performance	Wireless Status		Connected AP	N/A			^
C/27			Distance from AP	0 miles			
System Status			Operating Frequency	MHz			
2		Operat	ing Channel Bandwidth	20 MHz			
Wireless Status				-95 dBM			
<u>Ş</u>		Tra	nsmitter Output Power	orr			=
Network Status			Uplink MCS Mode	MCS 6			
			Downlink MCS Mode	MCS 6			
System Log		Power	Control Mode from AP	N/A			
		E	thernet Interface (LAN)	Up			
		w _	ireless Interface (WAN)	Up			
	Available AP List Collaps	Se Frequency Bandwidth	CINR RSSI	Network Entry State	l ast Network	Last AP Scan Security Mode	
		Carrier	11	sknown	Entry Event		
	StJohn-N 00:04:56:c0	0:0d:bf 5750 MHz 20 MHz	48 dB _47 dBm		0000:00:00:00	0000:00:00:05 open	
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- 3. Once the desired AP has been selected from this list, proceed with the configuration of the ePMP station by selecting the "QUICK START" button.
- 4. The "QUICK START" page contains the basic configuration parameters needed to allow an ePMP station to connect to an AP, all in one place. Using the information learned from the desired AP, add the AP to the "Preferred AP List" table by selecting "Add new AP". Selecting the "Edit" icon will allow adding the SSID and the pre-shared key (required if security mode not open for the AP) for the desired AP.

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Cambium Net	tworks   🏫 ePI	MP Station	Administrator							💿 🚱   💽	n P	C U
<b>\$</b>	CONFIGURE	6	₩	MONITOR		F	TOOLS	3	-r	QUICK	START	<b>i</b>
					Device Mode *	AP STA	Spectrum Analyze	-				
					Country Code *			٢				
					Device Name	Cambi	ium-STA					
				Ethernet (LAN) IF	Address Mode	Static DHCP						
				Ethernet (I	LAN) IP Address	192.1	168.0.2					
				Ethernet (LAN)	IP Subnet Mask	255.2	55.255.0					
			E	thernet (LAN) Gate	way IP Address							
				Authentication	Pre-shared Key			D				_
				Droforrod AD List	collanse	add new AB	·					
			I	#			Pre-shared Key					-
				~ <b>×</b>		2 🚺 🕺		2				
				Radio Frequency:	20 MHz Scan List	select all	unselect all					
5180 MHz	5185 MHz	5190 MHz	5195 MHz	5200 MHz	5205 MHz	5210 MHz	5215 MHz	5220 MHz	5225 MHz	5230 MHz	5235 MHz	
5240 MHz	5260 MHz	5265 MHz	5270 MHz	5275 MHz	5280 MHz	5285 MHz	5290 MHz	5295 MHz	5300 MHz	5305 MHz	5310 MHz	
5315 MHz	5320 MHz	5325 MHz	5330 MHz	5335 MHz	5340 MHz	5480 MHz	5485 MHz	5490 MHz	5495 MHz	5500 MHz	5505 MHz	
5510 MHz	5515 MHz	5520 MHz	5525 MHz	5530 MHz	5535 MHz	5540 MHz	5545 MHz	5550 MHz	5555 MHz	5560 MHz	5565 MHz	
5570 MHz	5575 MHz	5580 MHz	5585 MHz	5590 MHz	5595 MHz	5600 MHz	5605 MHz	5610 MHz	5615 MHz	5620 MHz	5625 MHz	
5630 MHz	5635 MHz	5640 MHz	5645 MHz	5650 MHz	5655 MHz	5660 MHz	5665 MHz	5670 MHz	5675 MHz	5680 MHz	5685 MHz	
5690 MHz	5695 MHz	5700 MHz	5705 MHz	5710 MHz	5715 MHz	5735 MHz	5740 MHz	5745 MHz	5750 MHz	5755 MHz	5760 MHz	
ETRE MAY	6770 MHz	6776 MM+	6780 MWY	6785 MH7	6700 MHz	6705 MH-	5800 MHz	5805 MH7	6840 MH7	ERAE ANNY	E () 🗟	2:16 PM

- Optionally, the channel frequencies to be scanned can also be selected on this page. Selecting a subset of channel frequencies will enable the scanning process to be performed only for those selected channels, making it quicker.
- 6. Once configuration changes have been completed, select the "Save Changes" button to make these changes part of the configuration of the ePMP station.

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Cambium Networks				6) <b>[] 5 1</b> 0 3
· · · ·				Save Changes
	Device Mode *	AP STA Spectrum Analyzer		
	Country Code *	Follow AP CC	\$	
	Device Name	Cambium-STA		
	Ethernet (LAN) IP Address Mode	Static DHCP		
	Ethernet (I AN) IP Address	192,168,0,2		
	Ethernet (I AN) ID Subnet Mark	255 255 255 0		
	Etileffiet (LAN) if Subliet Mask	200.200.0		
	Ethernet (LAN) Gateway IP Address			
	Authentication Pre-shared Key	•••••		
	Preferred AP List Collapse (	add new AP		
	# AP SSID	Pre-shared Key		
	A V X StJohn-N			
	Radio Frequency 20 MHz Scan List	select all unselect all		
5180 MHz 5185 MHz 5190 MHz 5195 MHz	5200 MHz 5205 MHz	5210 MHz 5215 MHz	5220 MHz 5225 MHz	5230 MHz 5235 MHz
5240 MHz 5260 MHz 5265 MHz 5270 MHz	5275 MHz 5280 MHz	5285 MHz 5290 MHz	5295 MHz 5300 MHz	5305 MHz 5310 MHz
5315 MHz 5320 MHz 5325 MHz 5330 MHz	5335 MHz 5340 MHz	5480 MHz 5485 MHz	5490 MHz 5495 MHz	5500 MHz 5505 MHz
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5570 MHz 5575 MHz 5580 MHz 5585 MHz	5590 MHz 5595 MHz	5600 MHz 5605 MHz	5610 MHz 5615 MHz	5620 MHz 6625 MHz
5630 MHz 5635 MHz 5640 MHz 5645 MHz	5650 MHz 5655 MHz	5660 MHz 5665 MHz	5670 MHz 5675 MHz	5680 MHz 5685 MHz
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5825 MHz 5830 MHz 583	35 MHz 5840 MHz 5845 M	Hz 5850 MHz 5855 MHz	. 5860 MHz 5865 MH	dz
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7. At this point, the ePMP radio should be ready to connect to the desired AP. To verify the status of the ePMP station, select "MONITOR" button and go to the "Wireless Status" section of that page. At the top of that page, the "Connected AP" field should reflect the status of the ePMP station by displaying the SSID of the desired AP.

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Cambium	Networks   🏫 ePMF	P Station Administra	itor					ି 🕄 💽	r 🖰 🕖 🗄
\$	CONFIGURE	.≁	MONITOR			TOOLS	ĨĨ	QUICK S	TART
Performance	Wireless Status				Connected	AP StJohn-N			^
System Status				Dis <sup>.</sup> Operat	tance from	AP 0.18 miles ncy 5750 MHz			
Wireless Status			Operati	ing Chan	nel Bandwi DL R	tth 20 MHz SSI -49 dBm			
Network Status			Trai	nsmitter	DL C	NR 47 dB ver -1 dBm			
System Log	Upink MCS Mode MCS 13 Downlink MCS 13 Downlink MCS 13								
			EI Wi	thernet li ircless Ir	interface (L) interface (W/	N) Up N) Up			
	Available AP List	collapse							
	SSID	MAC	Frequency Bandwidth Carrier	CINR	RSSI	Network Entry State	Last Network Entry Event	Last AP Scan	Security Mode
	StJohn-N	00:04:56:c0:0d:bf	5750 MHz 20 MHz	46 dB	-49 dBm	Success	0000:00:00:15	0000:00:00:00	open
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