



FreeStation

2x2 MIMO CPE + Free 4-in-1 AP



Free Customer Access Point



Free Network Extension



Free Installer Network

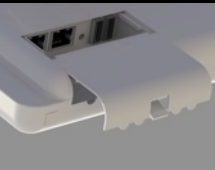


Free Hotspot Network

Industry-Leading Design



Tilt-able locking mounting system



Slide out I/O access door allows for easy and clean cable routing



LEDs for signal strength, LAN, PoE pass-through, and USB device connectivity



iPhone/iPad/Android App for Remote Device configuration and troubleshooting

End-to-End Network Visibility

- Always-On management WiFi network for non-intrusive configuration and troubleshooting
- Advanced on-the-fly statistics monitoring
- Client-level bandwidth management
- Flex-based diagnostic tools available inside device GUI (iPerf, Ping)



Specifications



Radio Performance

CPE Radio - 2x2 MIMO

	FreeStation 2	FreeStation 5
Operating Frequency	2.412 - 2.462 GHz	5.1 - 5.9 GHz*
TX Power (max)	24 dBm	
Operating Mode	Client, Client WDS, Client Router	
Channel Size	20 MHz / 40 MHz	

AP Radio - 1x1 SISO, 2.4 GHz

Operating Frequency	2.412 - 2.462 GHz
TX Power (max)	21 dBm
Operating Mode	AP, Hotspot
Channel Size	20 MHz / 40 MHz

		FreeStation 2		FreeStation 5	
		Avg. TX (+/- 2 dBm)	RX Sensitivity (+/- 2dBm)	Avg. TX (+/- 2 dBm)	RX Sensitivity (+/- 2dBm)
802.11 b/g (FS 2) 802.11 a (FS 5)	Data Rate				
	1-24 Mbps	24 dBm	-97 dBm	24 dBm	-97 dBm
	36 Mbps	22 dBm	-90 dBm	22 dBm	-90 dBm
	48 Mbps	20 dBm	-86 dBm	20 dBm	-86 dBm
	54 Mbps	19 dBm	-78 dBm	19 dBm	-78 dBm
802.11 n	MCS0	24 dBm	-97 dBm	23 dBm	-96 dBm
	MCS1	24 dBm	-96 dBm	23 dBm	-95 dBm
	MCS2	24 dBm	-93 dBm	23 dBm	-92 dBm
	MCS3	22 dBm	-91 dBm	21 dBm	-90 dBm
	MCS4	21 dBm	-87 dBm	20 dBm	-86 dBm
	MCS5	20 dBm	-84 dBm	19 dBm	-83 dBm
	MCS6	20 dBm	-78 dBm	19 dBm	-77 dBm
	MCS7	20 dBm	-75 dBm	18 dBm	-74 dBm
	MCS8	24 dBm	-97 dBm	23 dBm	-96 dBm
	MCS9	24 dBm	-96 dBm	23 dBm	-95 dBm
	MCS10	24 dBm	-93 dBm	23 dBm	-92 dBm
	MCS11	22 dBm	-91 dBm	21 dBm	-90 dBm
	MCS12	21 dBm	-87 dBm	20 dBm	-86 dBm
	MCS13	20 dBm	-84 dBm	19 dBm	-83 dBm
	MCS14	20 dBm	-78 dBm	19 dBm	-77 dBm
MCS15	20 dBm	-75 dBm	18 dBm	-74 dBm	

		Data Rate	Avg. TX (+/- 2 dBm)	RX Sensitivity (+/- 2dBm)
802.11 b/g	1-24 Mbps	21 dBm	-97 dBm	
	36 Mbps	20 dBm	-88 dBm	
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	MCS1	21 dBm	-96 dBm	
	MCS2	21 dBm	-93 dBm	
	MCS3	20 dBm	-91 dBm	
	MCS4	20 dBm	-87 dBm	
	MCS5	19 dBm	-84 dBm	
	MCS6	18 dBm	-78 dBm	
	MCS7	18 dBm	-75 dBm	

ARC • OS - Extensive Reporting, Powerful Features, Easy Management



*country dependent

Physical / Environmental

Dimensions	7.5 x 7.5 x 1.5 in (19 x 19 x 3.8 cm)
Weight	3 lb (1.4 kg)
External I/O	2 x RJ45 (PoE daisy-chain capable - 1.5A max) 2 x USB 2.0 1 x SMA Antenna Jack (for AP Radio)
Operating Temperature	-30° C - 70 °C
Operating Humidity	5 - 95% (condensing)

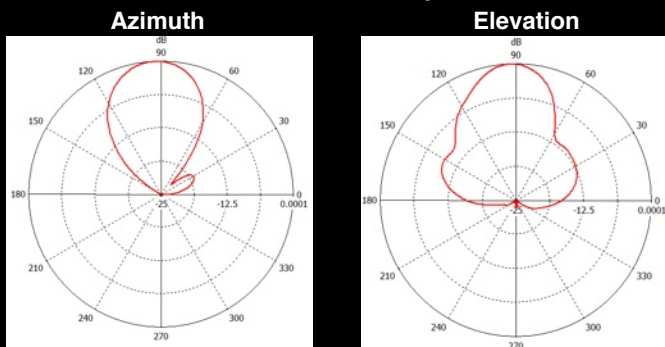
Input Voltage	9 - 24V PoE
Power Consumption	7.5 W (max)
Enclosure	UV Stabilized Plastic
Mounting	Pole and Wall Mounting Kit Included
Power Supply	24V / 0.7A PoE Power Supply Included
Regulatory Compliance	FCC Part 15.247, IC RS210, CE

Antenna Performance – integrated 2x2 MIMO Antenna

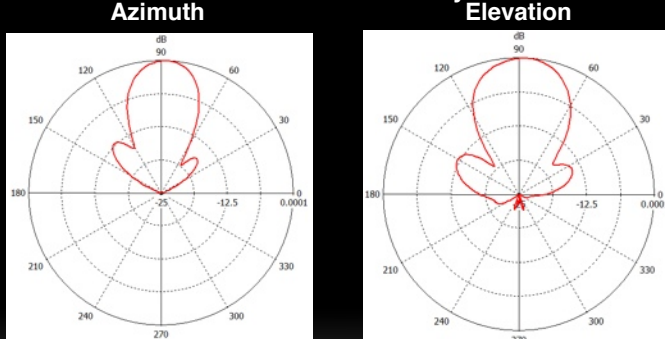
	<i>FreeStation 2</i>	<i>FreeStation 5</i>
Gain	15 dBi	18 dBi
3dB Beamwidth	Vertical: 30° Horizontal: 30°	Vertical: 30° Horizontal: 15°
Polarization	Dual Linear	Dual Linear
Max VSWR	1.5:1	1.5:1
Cross-pol Isolation	23 dB min	22 dB min

FreeStation 2 - Antenna Patterns

Vertical Polarity

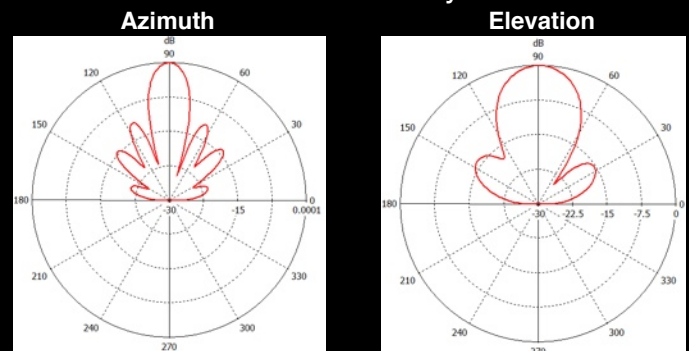


Horizontal Polarity

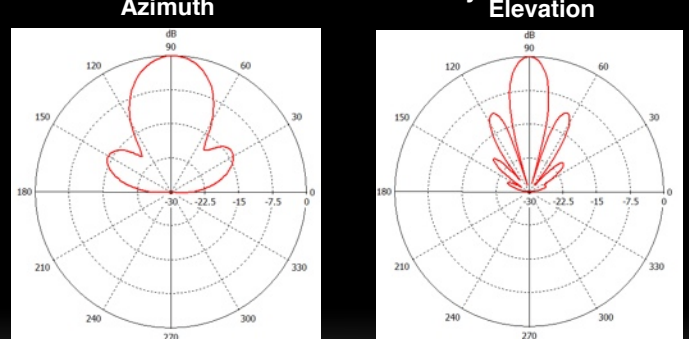


FreeStation 5 - Antenna Patterns

Vertical Polarity



Horizontal Polarity



Application Examples

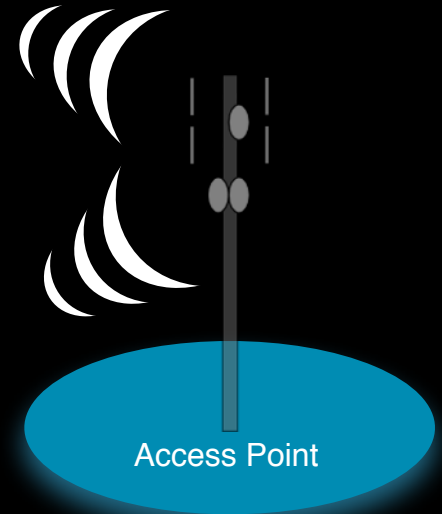
FreeStation as Office Installation

The *FreeStation* can be used to receive WAN access through the client radio while offering simultaneous access inside the premise with the built-in WIFI Access Point.



FreeStation as Residential Installation

The *FreeStation* can be used to access the carrier network while repeating network coverage using WIFI at the same time inside the customer premise.



FreeStation as HotZone Coverage

The *FreeStation* can be used to provide HotZone coverage and can serve as a network backhaul while simultaneously providing local hotspot access through a dedicated radio.

