



# PMP 450 Access Point

Now available in 2.4 GHz as well as 5 GHz (dual band), the Cambium Networks Point-to-Multipoint (PMP) 450 Access Point (AP) can provide more than 90 Mbps throughput and will be interoperable with PMP 430 Subscriber Modules (SM).

Utilizing 2x2 MIMO-OFDM technology, new deployments can take advantage of Cambium Networks proprietary feature set, while achieving data rates higher than 90 Mbps. From the available synchronization options to its diverse feature set, the PMP 450 provides flexible deployment options that make it a good fit for high capacity, high reliability networks.

Cambium Networks provides exceptional wireless broadband connectivity solutions. With more than 3 million modules deployed in thousands of networks around the world, Cambium solutions are proven to provide cost effective, reliable data, voice and video connectivity.

## SPECIFICATIONS

PRODUCT	
MODEL NUMBER	C054045A001A, C054045A002A, C054045A003A (5 GHz) C024045A001A (2.4 GHz)
SPECTRUM	
CHANNEL SPACING	Configurable on 2.5 MHz increments
FREQUENCY RANGE	5470 - 5875 MHz 2400 - 2483.5 MHz
CHANNEL WIDTH	5 MHz, 10 MHz or 20 MHz
INTERFACE	
MAC (MEDIA ACCESS CONTROL) LAYER	Cambium Proprietary
PHYSICAL LAYER	2x2 MIMO OFDM
ETHERNET INTERFACE	10/100/1000BaseT, half/full duplex, rate auto negotiated (802.3 compliant)
PROTOCOLS USED	IPv4, UDP, TCP, IP, ICMP, Telnet, SNMP, HTTP, FTP
NETWORK MANAGEMENT	HTTP, Telnet, FTP, SNMP v2c
VLAN	802.1ad (DVLAN Q-inQ), 802.1Q with 802.1p priority, dynamic port VID
PERFORMANCE	
SUBSCRIBERS PER SECTOR	Up to 238
ARQ	Yes
NOMINAL RECEIVE SENSITIVITY (w/ FEC) @ 5 MHz CHANNEL	OFDM: 2X=-89, 4X=-82, 6X=-75
NOMINAL RECEIVE SENSITIVITY (w/ FEC) @ 10MHZ CHANNEL	OFDM: 2X=-86, 4X=-79, 6X=-72
NOMINAL RECEIVE SENSITIVITY (w/ FEC) @ 20MHZ CHANNEL	OFDM: 2X=-83, 4X=-76, 6X=-69
MAXIMUM DEPLOYMENT RANGE	Up to 25 miles (5 GHz) Up to 40 miles (2.4 GHz)
MODULATION LEVELS (ADAPTIVE)	OFDM: QPSK, 16-QAM, 64-QAM (MIMO-B)
LATENCY	3 - 5 ms

## SPECIFICATIONS

<b>GPS SYNCHRONIZATION</b>	Yes, via CMM3, CMM4 or UGPS
<b>QUALITY OF SERVICE</b>	Diffserve QoS
<b>LINK BUDGET</b>	
<b>ANTENNA BEAM WIDTH</b>	60° or 90° sectors are available (Dual polarity, H + V)
<b>TRANSMIT POWER</b>	OFDM: -30 to +22 dBm (combined, to EIRP limit by region) (1 dB interval)
<b>ANTENNA GAIN</b>	17 dBi H+V (with either 60° or 90° sector antenna)
<b>MAXIMUM TRANSMIT POWER</b>	22 dBm combined OFDM
<b>PHYSICAL</b>	
<b>ANTENNA CONNECTION</b>	50 ohm, N-type
<b>SURGE SUPPRESSION</b>	1 Joule Integrated
<b>MEAN TIME BETWEEN FAILURE</b>	> 40 Years
<b>ENVIRONMENTAL</b>	IP67, IP66
<b>TEMPERATURE</b>	-40°C to +55°C (-40°F to +131°F)
<b>WEIGHT</b>	5.9 kg (13 lbs) with antenna 2.5 kg (5.5 lbs) without antenna
<b>WIND SURVIVAL</b>	190 km/hour (118 mi/hour)
<b>DIMENSIONS (HxWxD)</b>	Radio: 27x21x7 cm (10.6"x8.3"x2.8") Antenna: 51x13x7.3 cm (20.2"x 5.1" x 2.9")
<b>MAXIMUM POWER CONSUMPTION</b>	14 W
<b>INPUT VOLTAGE</b>	24 to 30 V
<b>SECURITY</b>	
<b>ENCRYPTION</b>	56-bit DES, FIPS-197 128-bit AES
<b>CERTIFICATIONS</b>	
<b>INDUSTRY CANADA CERT</b>	109W-0002 (5.4, 5.8 GHz) 109W-0004 (2.4 GHz)
<b>FCC ID</b>	Z8H89FT0002 (5.4, 5.8 GHz) Z8H89FT0004 (2.4 GHz)
<b>CE</b>	EN 301 893 v1.6.1 (5.4 GHz) EN 302 502 v1.2.1 (5.8 GHz)