



## PMP 450 Subscriber Module

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	4 Mbps: C054045C001A, C024045C001A, C054045C005A*, C024045C005A* 10 Mbps: C054045C002A, C024045C002A, C054045C006A*, C024045C006A* 20 Mbps: C054045C003A, C024045C003A, C054045C007A*, C024045C007A* 60 Mbps: C054045C004A, C024045C004A, C054045C008A*, C024045C008A*
SPECTRUM	
CHANNEL SPACING	Configurable on 2.5 MHz increments
FREQUENCY RANGE	5470 MHz - 5875 MHz 2400 MHz - 2483.5 MHz
CHANNEL WIDTH	5 MHz, 10 MHz or 20 MHz
INTERFACE	
PHYSICAL LAYER	2x2 MIMO OFDM
MAC (MEDIA ACCESS CONTROL) LAYER	Cambium Proprietary
ETHERNET INTERFACE	10/100BaseT, 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	
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
MODULATION LEVELS (ADAPTIVE)	OFDM: QPSK, 16-QAM, 64-QAM
MAXIMUM DEPLOYMENT RANGE	Up to 25 miles with reflector dish (5 GHz) Up to 40 miles with reflector dish (2.4 GHz)

SPECIFICATIONS	
LATENCY	3 - 5 ms
GPS SYNCHRONIZATION	Yes, via CMM3, CMM4 or UGPS
QUALITY OF SERVICE	Diffserve QoS
LINK BUDGET	
ANTENNA BEAM WIDTH	55° azimuth, 55° elevation (both H&V)
TRANSMIT POWER	-30 to +22 dBm (combined, to EIRP limit by region) (1 dB interval)
ANTENNA GAIN	9 dBi H+V, integrated patch (5 GHz) 8 dBi Dual Slant, integrated patch (2.4 GHz)
MAXIMUM TRANSMIT POWER	22 dBm combined
REFLECTOR GAIN	+ 14 dBi
LENS GAIN	+8 dBi (with CLIP (Cassegrain Lens for Improved Performance), for 5 GHz only)
PHYSICAL	
ANTENNA CONNECTION	Integrated patch antenna
MEAN TIME BETWEEN FAILURE	> 40 Years
ENVIRONMENTAL	IP55
TEMPERATURE	-40°C to +55°C (-40°F to +131°F)
WEIGHT	0.45 kg (1 lb.)
WIND SURVIVAL	190 km/hour (118 mi/hour)
DIMENSIONS (HxWxD)	30 x 9 x 9 cm (11.75" x 3.4" x 3.4")
MAXIMUM POWER CONSUMPTION	12 W
INPUT VOLTAGE	24 to 30 V
SECURITY	
ENCRYPTION	56-bit DES, FIPS-197 128-bit AES
CERTIFICATIONS	
CE	EN 301 893 v1.6.1 (5.4 GHz) EN 302 502 v1.2.1 (5.8 GHz)
INDUSTRY CANADA CERT	109W-0001 (5.4, 5.8 GHz) 109W-0003 (2.4 GHz)
FCC ID	Z8H89FT0001 (5.4, 5.8 GHz) Z8H89FT0003 (2.4 GHz)