Cambium Networks

SPEC SHEET

# PMP 450 Subscriber Module

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 and PMP 100 Series Subscriber Modules (SM). Service providers with an installed base of PMP 100 subscribers can migrate to new high-throughput PMP 450 modules to enhance overall capacity; allowing more users and/or higher rate plans.

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

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|---|---|
| **PRODUCT** | |
| **MODEL NUMBER** | C054045C001A, C054045C002A, C054045C003A, C054045C004A |
| **SPECTRUM** | |
| **CHANNEL SPACING** | Configurable on 5 MHz increments |
| **FREQUENCY RANGE** | 5470 MHz - 5875 MHz |
| **CHANNEL WIDTH** | 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) @ 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 |
| **LATENCY** | 3 - 5 ms |
| **GPS SYNCHRONIZATION** | Yes, via CMM3, CMM4 or UGPS |
| **QUALITY OF SERVICE** | Diffserve QoS |
| **LINK BUDGET** | |

## SPECIFICATIONS

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|---|---|
| **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 |
| **MAXIMUM TRANSMIT POWER** | 22 dBm combined |
| **REFLECTOR GAIN** | + 14 dBi |
| **LENS GAIN** | + 5.5 dBi (or get +8 dBi with the new CLIP (Cassegrain Lens for Improved Performance)) |
| **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 302 502 v1.2.1<br>EN 301 893 v1.6.1 |
| **INDUSTRY CANADA CERT** | 109W-0001 |
| **FCC ID** | Z8H89FT0001 |



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