



PMP 450i 900 MHz

ACCESS POINT AND SUBSCRIBER MODULE

Cambium Networks PMP 450 is the premiere outdoor fixed wireless platform providing quality, performance, unmatched spectral efficiency and unrivaled scalability. PMP 450i 900 MHz allows for deeper frequency propagation to suit the needs of rural broadband deployments, SCADA and sensor data backhaul and even video surveillance applications.

Key features of PMP 450i 900 MHz include:

- Deeper frequency propagation for Cambium Networks PMP 450 platform
- Provides a reliable link for near and non-line-of-site (NLOS) deployments
- 100+ Mbps subscriber capacity in a 20 MHz channel
- Access point is now 802.3at compatible and includes an AUX port, while the Subscriber can re-use the 30 VDC power supplies common to the PMP 100 platform

PMP 450 has been deployed in hundreds of networks in over 50 countries, with over five billion field hours of service. This platform offers a flexible, reliable wireless broadband solution to support the many fixed wireless applications of a network operator including: rural connectivity; 3G / 4G offload; video surveillance; leased line replacement; remote office connectivity; smart grid advanced metering infrastructure (AMI), border patrol; primary or redundant connectivity; connectivity at special events; disaster recovery; and traffic monitoring and control.



PMP 450i 900 MHz Subscriber Module



PMP 450i 900 MHz Access Point

| PRODUCT | ACCESS POINT | SUBSCRIBER MODULE |
|-----------------|--|-------------------|
| Model Number | C009045A001A | C009045C001A |
| SPECTRUM | | |
| Channel Spacing | Configurable on 0.5 MHz increments | |
| Frequency Range | 902 - 928 MHz | |
| Channel Width | 5 MHz, 7 MHz, 10 MHz, 15 MHz or 20 MHz | |

Specifications

INTERFACE

| | |
|----------------------------------|--|
| MAC (Media Access Control) Layer | Cambium Networks proprietary |
| Physical Layer | 2x2 MIMO OFDM |
| Ethernet Interfaced | 100/1000BaseT, full duplex, rate auto negotiated, 802.3 compliant (SM is 10/100BaseT only) |
| Protocols Used | IPv4, UDP, TCP, IP, ICMP, Telnet, SNMP, HTTP, FTP |
| Network Management | HTTP, HTTPS, Telnet, FTP, SNMP v2 and v3 |
| VLAN | 802.1ad (DVLAN Q-inQ), 802.1Q with 802.1p priority, dynamic port VID |

SECURITY

| | |
|------------|----------------------------------|
| Encryption | 56-bit DES, FIPS-197 128-bit AES |
|------------|----------------------------------|

PERFORMANCE

| | | |
|------------------------------|----------------------------------|---------------------------------------|
| Subscribers Per Sector | Up to 238 | |
| ARQ | Yes | |
| Modulation Levels (Adaptive) | MCS | Signal to Noise Required (SNR, in dB) |
| 2X | QPSK | 10 |
| 4X | 16QAM | 17 |
| 6X | 64QAM | 24 |
| 8X | 256QAM | 32 |
| Maximum Deployment Range | Up to 120 miles (190 km) | |
| Latency | 3 - 5 ms, typical | |
| GPS Synchronization | Yes, via Autosync (CMM4 or UGPS) | |
| Quality of Service | Diffserve QoS | |

LINK BUDGET

| | |
|------------------------|---|
| Transmit Power Range | 22 dB dynamic range (to EIRP limit by region) (1 dB step) |
| Maximum Transmit Power | +25 dBm combined output |

PHYSICAL

ACCESS POINT

SUBSCRIBER MODULE

| | | |
|---------------------------|---|--|
| Antenna Connection | 50 ohm, N-Type | 50 ohm, RPSMA |
| Surge Suppression | EN61000-4-5: 1.2us/50us, 500 V voltage waveform | EN61000-4-5: 1.2us/50us, 500 V voltage waveform |
| Mean Time Between Failure | > 40 Years | > 40 Years |
| Environmental | IP 66, 67 | IP 55 |
| Temperature / Humidity | -40°C to +60°C (-40°F to +140°F), 0-95% non-condensing | -40°C to +60°C (-40°F to +140°F), 0-95% non-condensing |
| Weight | Access Point: 1.8 kg (4 lbs.) | Subscriber Module: 0.45 kg (1 lb.) |
| Wind Survival | 190 km/hour (118 mi/hour) | 190 km/hour (118 mi/hour) |
| Dimensions (h x w x d) | Access Point: 26 x 13.4 x 6.4 cm (10.3" x 5.3" x 3.3") | Subscriber Module: 30 x 9 x 5 cm (11" x 3.5" x 2") |
| Power Consumption | 18 W typical, 20 W max (up to 50W with AUX port in use) | 12 W typical, 15 W max |
| Input Voltage | 48 - 56 V DC, PoE 802.3at | 20 - 32 V DC |

CERTIFICATIONS

| | | |
|-----------------|-------------|-------------|
| Industry Canada | 109W-0022 | 109W-0021 |
| FCC ID | Z8H89FT0022 | Z8H89FT0021 |
