



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 Access Point

PMP 450i 900 MHz Subscriber Module

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
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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
