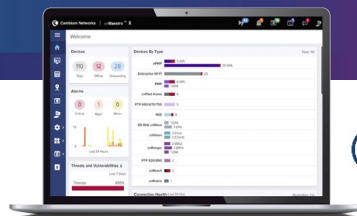


# PMP 450b6

## Subscriber Module

### PMP 450b6 Quick Look

- Low-cost entry point into 6 GHz
- Re-banded PMP 450b radio to support 5.7 GHz to 6.3 GHz
- Capable of up to 300 Mbps aggregate in a 40 MHz channel



### Key Features

- Gigabit Ethernet interface provides the maximum transfer rates to the device
- Available as a high-gain (24 dBi) integrated dish
- 3.5 mm audio jack allows direct connection of headphones for alignment without any adaptors
- Modified and recalibrated 450b to support nearly all of the newly released UNII-5 spectrum band (up to 6.3 GHz)
- New System on a Chip (SoC) enhances packet processing power more than 4x that of the 450 subscriber module (SM)



## PMP 450b6 Subscriber Module

Radio Model Number		Spectrum	
High-Gain (radio only)	C060045C012A	Channel Spacing	Configurable on 2.5 MHz increments
4-Pack High-Gain Assembly	N050045D002A	Frequency Range	5725–6300 MHz
		Channel Width	5 MHz, 10 MHz, 15 MHz, 20 MHz, 30 MHz, or 40 MHz

Interface	
MAC (Media Access Control) Layer	Cambium Networks proprietary
Physical Layer	2x2 MIMO OFDM
Ethernet Interface	100/1000 BaseT, full duplex, rate auto negotiated, 802.3 compliant
Protocols Used	IPv4, IPv6, UDP, TCP/IP, ICMP, Telnet, SNMP, HTTP, FTP
Network Management	IPv4/IPv6 (dual stack), HTTP, HTTPS, Telnet, FTP, SNMPv2c and v3, Cambium Networks cnMaestro™
MTU	1700 bytes
VLAN	802.1ad (DVLAN Q-inQ), 802.1Q with 802.1p priority, dynamic port VID

Security	
Encryption	FIPS-197 128-bit AES, 256-bit AES (requires optional license for attached access point)

Performance		
PPS	50,000	
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
Ultimate Sensitivity	-94 dBm	
Maximum Deployment Range	Up to 64 km (40 mi) in point-to-multipoint (PMP) mode, up to 200 km (124 mi) in point-to-point (PTP) mode	
Latency	3–5 ms, typical	
GPS Synchronization	Yes, synchronized by access point or via 3.5 mm port using cnPulse (for PTP mode)	
Quality of Service	Diffserve QoS	

## PMP 450b6 Subscriber Module

### Physical

Antenna	Optional radome: N000900L021A
Accessories	
Surge Suppression	EN 61000-4-5: 10x700 $\mu$ s, 4 kV, EN 61000-4-2: ESD 30 kV contact / 30 kV air
Mean Time Between Failure	> 40 Years
Environmental	IP55, Optional glands to enhance to IP67 (N000000L135A)
Wind Survival	200 kph (124 mph)
Temperature / Humidity	-40°C to 60°C (-40°F to 140°F), 0–100% non-condensing
Weight	3.1 kg (7 lb) including mounting bracket
Dimensions (HxWxD)	Diameter 45 x 28 cm (17.8 in x 11.2 in)
Pole Diameter Range (w/included mount)	2.5 cm to 7.6 cm (1 in to 3 in) $\pm$ 20 degrees mechanical tilt
Power Consumption	9 W typical, 12 W peak
Input Voltage	20–32 VDC

### Antenna

Integrated Antenna	24 dBi
Peak Gain	
3 dB Beamwidth – Azimuth	7°
3 dB Beamwidth – Elevation	7°
Polarization	Dual linear, H + V
Front-to-Back Isolation	>25 dB
Cross Polarization	15 dB

### Link Budget

Transmit Power Range	54 dB dynamic range (to EIRP limit by region) (1 dB step)
Maximum Transmit Power	+27 dBm (MIMO, combined V+H)
Power Control	ATPC (Automatic Transmit Power Control) at system level; all subscribers implement ATPC

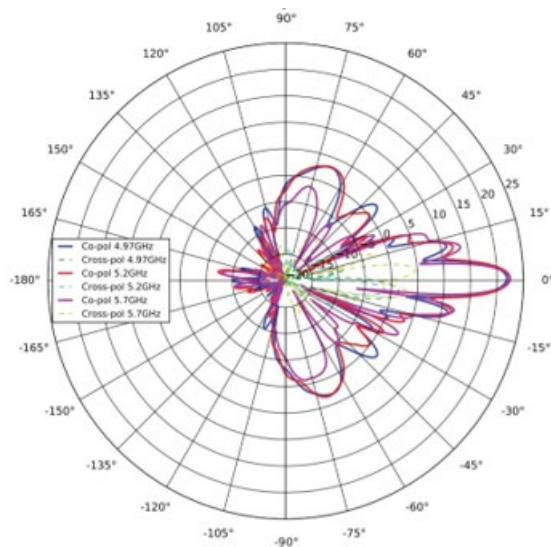
### Certifications

ISED Canada	109W-0084
FCC ID	Z8H89FT0084
ETSI	EN 301 893 v2.1.1 EN 302 502 v2.1.1

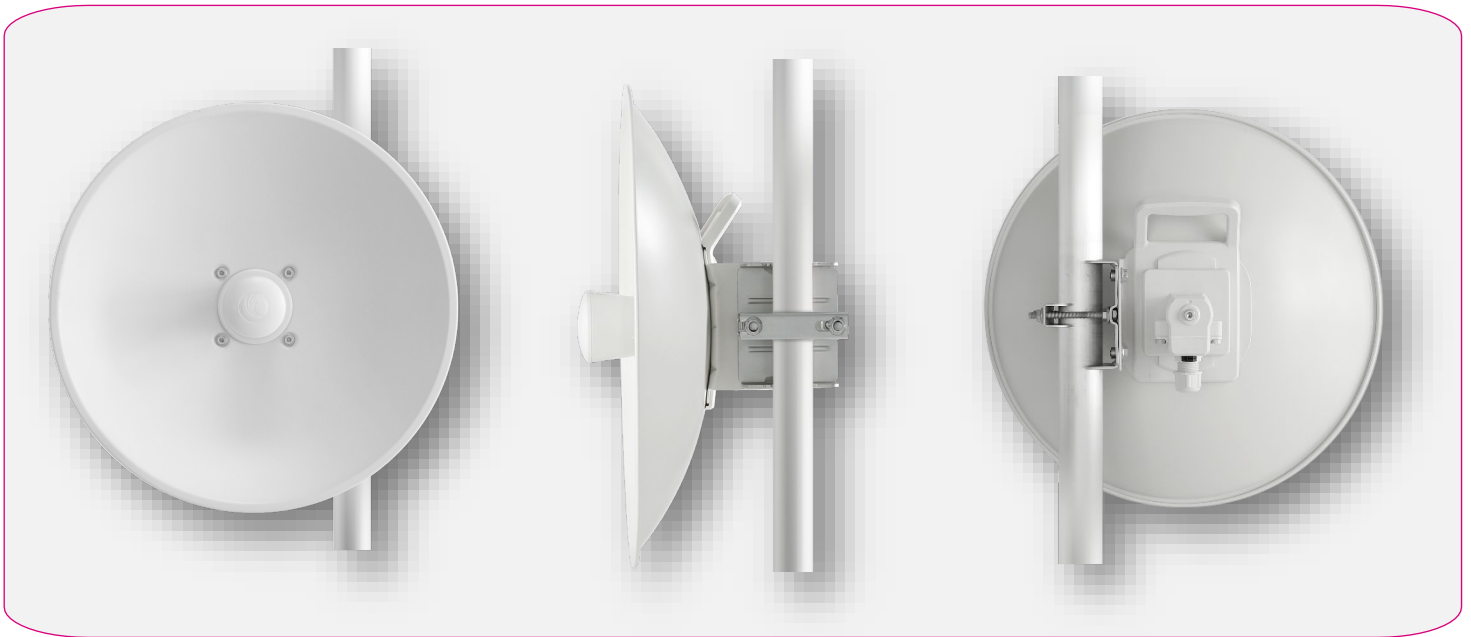
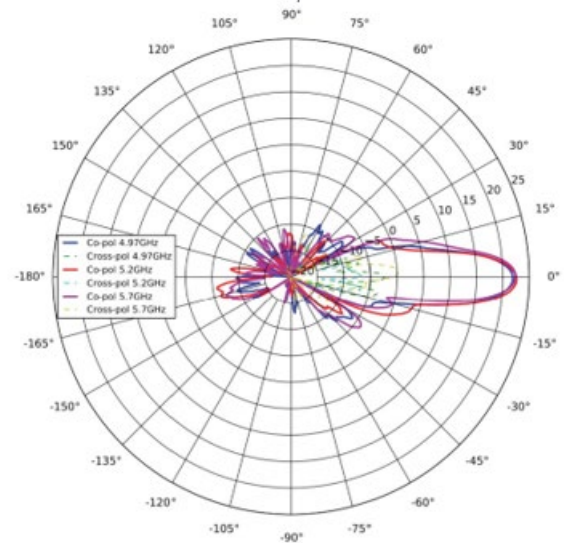
## PMP 450b6 Subscriber Module

### Antenna Patterns

Azimuth, Vertical



Elevation, Vertical



### ABOUT CAMBIUM NETWORKS

Cambium Networks enables service providers, enterprises, industrial organizations, and governments to deliver exceptional digital experiences and device connectivity with compelling economics. Our ONE Network platform simplifies management of Cambium Networks' wired and wireless broadband and network edge technologies. Our customers can focus more resources on managing their business rather than the network. We make connectivity that just works.