

PMP 450b Omnidirectional

Fixed Wireless Subscriber Module

PMP 450b Omnidirectional SM Quick Look

The 450 platform adds a specialized tool to connect subscribers with an omnidirectional subscriber module.

- Ultra-wide-band radio: 4.9 GHz to 5.925 GHz
- Capable of up to 300 Mbps aggregate in a 40 MHz channel
- Omnidirectional antenna, well-suited for nomadic use case





Key Features

- Software-defined, purpose-built technology.
- Gigabit Ethernet interface provides the maximum transfer rates to the device.
- New System on a Chip (SoC) enhances Packet Processing Power more than 4x that of the original 450 hardware.
- Integrates seamlessly and affordably with existing 450 platform devices to extend coverage to obstructed or hard-to-reach areas.

- Centralized cloud management using cnMaestro™.
- Features fully scheduled deterministic TDD, with low and consistent latency to perform under load.
- Available with omnidirectional antenna.

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PMP 450b Omnidirectional Fixed Wireless Subscriber Module

Product Sales Information	
Omni (9 dBi)	C050045B201B (global)
Channel Spacing	Configurable on 2.5 MHz increments
Frequency Range	4900–5925 MHz
Channel Width	5 MHz, 10 MHz, 15 MHz, 20 MHz, 30 MHz, or 40 MHz Text

Interface	
MAC (Media Access Control) Layer	Cambium Networks proprietary
Physical Layer	2x2 MIMO OFDM
Ethernet Interface	100/1000BaseT, 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, 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)

Performance			
ARQ	Yes		
Modulation Levels (Adapative)		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 10 km (6 mi) — May be limited by total link budget		
Latency	3–5 ms, typical		
Quality of Service	Diffserve QoS		



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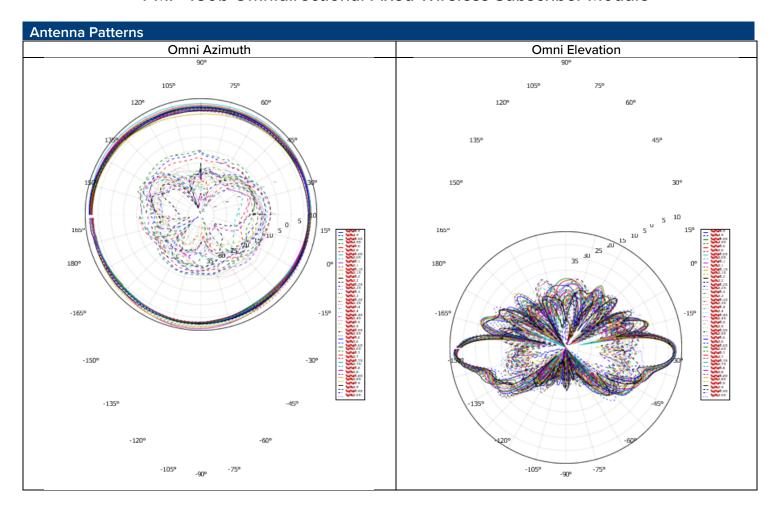
Physical	
Surge Suppression	EN 61000-4-5: 10x700us, 4Kv, EN 61000-4-2: ESD 30kV contact / 30kV air
Mean Time Between Failure	>40 years
Environmental	IP67
Temperature	-40°C to 60°C (-40°F to 140°F)
Humidity	0-100% non-condensing
Weight	1.2 kg (2.65 lb) (including mounting bracket)
Wind Survival	200 kph (124 mph)
Dimensions	56 cm x 9 cm x 9 cm (22 in x 3.5 in x 3.5 in)
$(H \times W \times D)$	mount standoff 11 cm (4.3 in)
Power Consumption	9W typical, 12W peak
Input Voltage	46–59V DC, 802.3af compatible
Integrated Antenna Peak Gain	9 dBi
3 dB Bandwidth – Azimuth	360°
3 dB Beamwidth – Elevation	12°
Polarization	Dual linear, H + V
Cross Polarization	15 dB

Link Budget	
Transmit Power	56 dB dynamic range (to EIRP limit by region) (1 dB step)
Range	
Maximum Transit	+27 dBm (MIMO, combined V + H) (+22 dBm @ 256 QAM)
Power	
Power Control	ATPC (Automatic Transmit Power Control) at system level; all subscribers implement ATPC

Certifications	
ISED Canada	109W-0032
FCC ID	Z8H89FT0032
ETSI	EN 301 893 v2.1.1
	EN 302 502 v2.1.1



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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.

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