



PMP 450b, 50 Mbps Subscriber Module

Cambium Networks PMP 450 platform increases performance with the addition of the PMP 450b Subscriber Module.



KEY FEATURES:

- **Ultra-wide band** radio supporting the entire band, from 4.9 to 5.925 GHz.
- **Gigabit Ethernet Interface** provides the maximum transfer rates to the device.
- **3.5 mm audio jack** allows direct connection of headphones without any adapters.
- New System on a Chip (SoC) enhances **Packet Processing Power** more than 4x that of the 450 SM.
- Capable of 50 Mbps, upgradeable to **300 Mbps** aggregate in a 40 MHz channel.

SPECIFICATIONS

PRODUCT

Model Numbers C050045H022A (4-pack)

SPECTRUM

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

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, Cambium Networks cnMaestro™

MTU 1700 bytes

VLAN 802.1ad (DVLAN Q-in-Q), 802.1Q with 802.1p priority, dynamic port VID

SECURITY

Encryption FIPS-197 128-bit AES, 256-bit AES (optional)

SPECIFICATIONS

PERFORMANCE

PPS	50,000
ARQ	Yes
Modulation Levels (Adaptive)	MCS
2X	QPSK
4X	16-QAM
6X	64-QAM
8X	256-QAM
Ultimate Sensitivity	-94 dBm
Maximum Deployment Range	Up to 40 miles (64 km)
Latency	3 - 5 ms, typical
GPS Synchronization	Yes, synchronized by Access Point
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	+28 dBm (MIMO, combined V+H) (+22 dBm @ 256QAM)

ANTENNA

Integrated Antenna Peak Gain	25 dBi \pm 1 dBi
3 dB Beamwidth - Azimuth	7°
3 dB Beamwidth - Elevation	7°
Polarization	Dual linear, H + V
Front-to-Back Isolation	>25 dB
Port-to-Port Isolation	30 dB
Cross Polarization	26 dB
Maximum Input Power	10 W
Input Impedance	50 ohms
VSWR (max)	1.5:1

PHYSICAL

Antenna Accessories	Optional Radome: N000900L021A
Surge Suppression	EN 61000-4-5: 10x700us, 4Kv EN 61000-4-2: ESD 30kV contact / 30kV air
Mean Time Between Failure	> 40 Years
Environmental	IP 67, RoHS / WEEE Compliant
Temperature / Humidity	-40°C to +60°C (-40°F to +140°F), 0-95% non-condensing
Weight	3.1 kg (7 lb.) (includes mounting bracket)
Wind Survival	180 km/hour (112 mi/hour)
Dimensions (HxWxD) (including mount)	45 cm diameter x 28 cm (17.8" diameter x 11.2")
Mounting Hardware	Tower/Pole mount, Adjustmetn of 180° Horizontal with -10° to +5° tilt; GEOMET coating
Pole Diameter Range (w/ included mount)	2.5 - 7.6 cm (1" to 3")
Shock/Vibration	MIL-STD-810G Method 516.6 / MIL-STD-810G Method 514.6 procedures I/C24, II/C5
Power Consumption	9 W nominal, 12 W peak
Input Voltage	20 - 32 V DC

CERTIFICATIONS

Industry Canada	109W-0042
FCC ID	Z8H89FT0042
ETSI	EN 301 893 v1.8.1, EN 301 893 v2.1.1 Clause 4.8 EN 302 502 v2.1.1

C050045H022A (HIGH GAIN) ANTENNA PATTERNS

