

# 3 GHz PMP 450m Access Point

## QUICK LOOK:

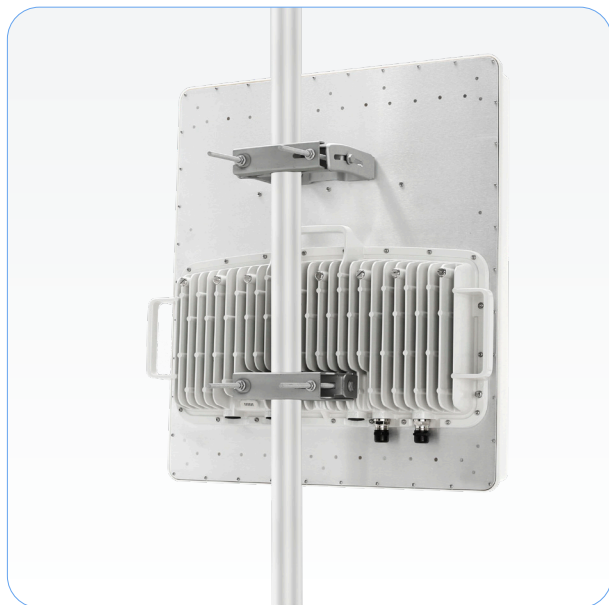
Cambium Networks industry-leading 450 platform adds Massive Multi-User MIMO capability with cnMedusa™ technology.

- **Throughput of over 450 Mbps in a 20 MHz channel; More than 800 Mbps in a 40 MHz channel**
- **MU-MIMO with spectral efficiency of more than 50 bps/Hz**
- **Features smart beamforming to reduce interference**



## KEY FEATURES

- **cnMedusa™** technology enhances sector capacity by combining a smart beamforming antenna array with multiple RF transmit and receive chains, effectively multiplying available capacity by more than three times.
- Protect your investment in the 450 platform equipment by continuing to utilize existing Subscriber Modules (all 450 platform subscribers work with the 450m and cnMedusa technology)
- SFP port allows for greater deployment flexibility, and AUX port allows for connection of camera or other PoE directly.
- The Limited Version can reduce capital investment until additional capacity is actually required. A 30-day trial of MU-MIMO operation is included, and a simple license key can permanently enable MU-MIMO operation when needed.



## 3 GHz PMP 450m Access Point

### Product Model Numbers

	Global	No Encryption
<b>Integrated 90° Sector</b>	C030045A101B	C030045A104B
<b>Limited Version</b>	C030045A111B	C030045A114B

### Spectrum

<b>Channel Spacing</b>	Customizable channel selection to 50 KHz raster
<b>Frequency Range</b>	3300–4200 MHz
<b>Channel Width</b>	5, 10, 15, 20, 30 and 40 MHz

## Specifications

### Interface

<b>MAC (Media Access Control) Layer</b>	Cambium Networks proprietary
<b>Physical Layer</b>	8 x 8 Multi-User MIMO OFDM
<b>Ethernet Interface</b>	100/1000BaseT, full duplex, rate auto negotiated (802.3 compliant), SFP support for 1 Gbps optical
<b>Protocols Used</b>	IPv4, UDP, TCP, IP, ICMP, Telnet, SNMP, HTTP, FTP
<b>Network Management</b>	IPv4/IPv6 (dual stack), HTTP, HTTPS, Telnet, FTP, SNMPv2c and v3, Cambium Networks cnMaestro™
<b>VLAN</b>	802.1ad (DVLAN Q-inQ), 802.1Q with 802.1p priority, dynamic port VID

### Security

<b>Encryption</b>	FIPS-197 128-bit AES, 256-bit AES ( <i>Requires Optional License for attached Access Point</i> )
-------------------	---

## 3 GHz PMP 450m Access Point

### Performance

Subscribers Per Sector	Up to 238	
ARQ	Yes	
Modulation Levels (Adaptive)	MCS	Signal to Noise Required (SNR, in dB)
2x	QPSK	10
4x	16 QAM	17
6x	64 QAM	24
8x	256 QAM	32
Ultimate Sensitivity	-94 dBm	
Maximum Deployment Range	Up to 64 km (40 miles)	
Latency	10 ms, typical	
GPS Synchronization	Yes, via Autosync (CMM5 or UGPS)	
Quality of Service	Diffserve QoS	

### Antenna

<b>Beam width - Azimuth</b>	90° integrated sector (dual polarity, H+V, 3dB rolloff), 120° (6dB rolloff)
<b>Beam width - Elevation</b>	2° Electrical Downtilt, 8° Elevation Beamwidth and Null Fill down to -30°
<b>Maximum EIRP</b>	+52 dBm (or up to maximum allowed by regulation) - achieved by combining 16 dBi Antenna Gain and +36 dBm Max Tx Power

### Physical

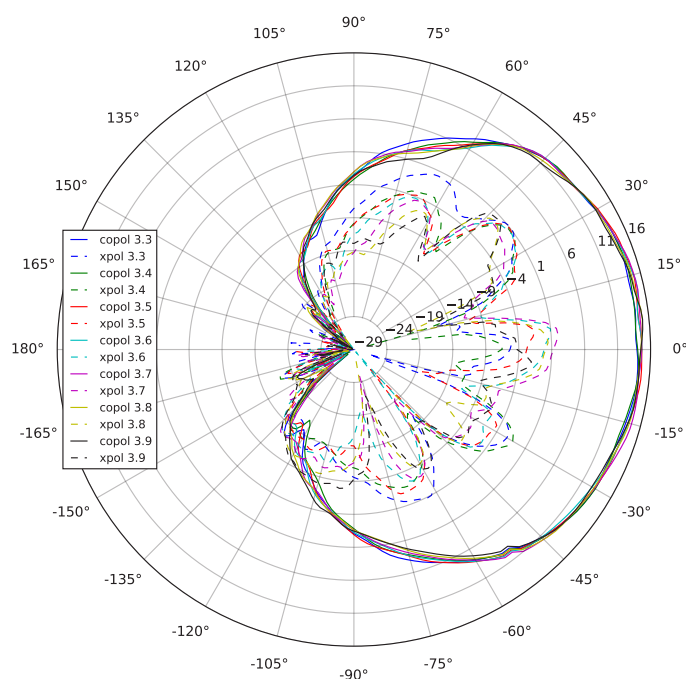
<b>Antenna Connection</b>	Integrated Sector Array
<b>Surge Suppression (with LPU)</b>	<b>MAIN and AUX ports:</b> EN61000-4-5: 10/700us, 4 kV voltage waveform, Recommended external surge suppressor: Model # C000065L007B <b>DC IN port:</b> EN61000-4-5: 10/700us, 4 kV voltage waveform, Recommended external surge suppressor: Model # C000000L114A
<b>Mean Time Between Failure</b>	> 40 years
<b>Environmental</b>	IP67, IP66
<b>Temperature / Humidity</b>	-40°C to 60°C (-40°F to 140°F), 100% non-condensing
<b>Weight</b>	Without Mounting Brackets: 20.4 kg (45 lbs)    With Mounting Brackets: 22.6 kg (49.8 lbs)
<b>Wind Survival</b>	200 kph (124 mph)
<b>Wind Loading - Front Facing</b>	@144 kph / 90 mph:      613 N @177 kph / 110 mph:      927 N @200 kph / 124 mph:      1183 N
<b>Dimensions (Diameter x Depth)</b>	69 x 61 x 17.5 cm (27.2 x 24 x 7 in)
<b>Power Consumption</b>	140W typical, 150W peak (up to 180W max with AUX port PoE enabled)
<b>Input Voltage</b>	40–60VDC
<b>Mounting</b>	Pole mount with included brackets (1.25 in to 4 in pole diameter)

## 3 GHz PMP 450m Access Point

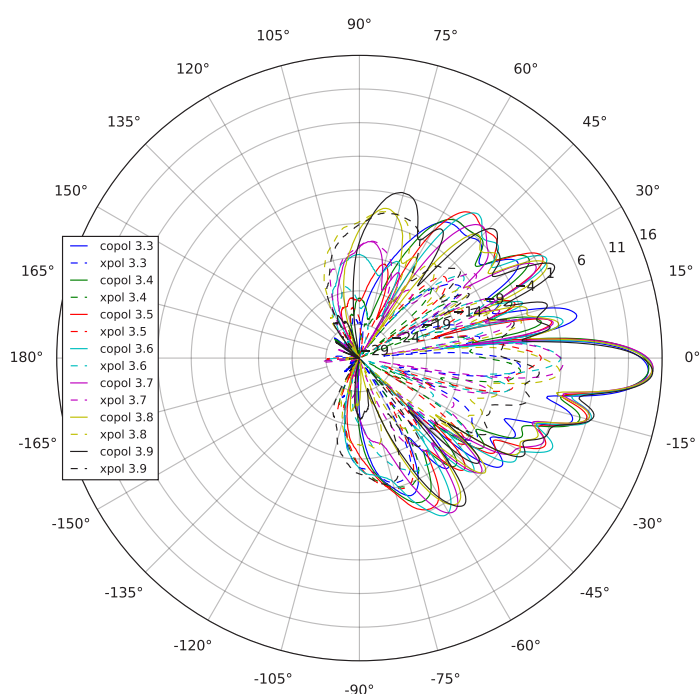
### Certifications

<b>ISED Canada</b>	109A0-30450M (3 GHz)
<b>FCC ID</b>	QWP-30450M (3 GHz)
<b>CE</b>	EN 302 326-2 v1.2.2 (3 GHz)

### 3 GHz 450m Antenna Patterns (Sector Mode)



3 GHz Azimuth



3 GHz Elevation

### ABOUT CAMBIUM NETWORKS

Cambium Networks empowers millions of people with wireless connectivity worldwide. Its wireless portfolio is used by commercial and government network operators as well as broadband service providers to connect people, places and things. With a single network architecture spanning fixed wireless and Wi-Fi, Cambium Networks enables operators to achieve maximum performance with minimal spectrum. End-to-end cloud management transforms networks into dynamic environments that evolve to meet changing needs with minimal physical human intervention. Cambium Networks empowers a growing ecosystem of partners who design and deliver gigabit wireless solutions that just work.

**EQUIPMENT  
FOR SALE**

# CAMBIUM NETWORKS EQUIPMENT

**ePMP 4600 Access Point Radios &  
PMP 450m 3GHz Access Point with  
Integrated 90° Sector Antenna**



**BRAND NEW**

Cambium's **ePMP 4600 Series** is used to deliver high-capacity, fixed wireless broadband—typically in point-to-multipoint (PMP) network architectures—where fiber is too expensive or slow to deploy.

Cambium's **PMP 450m AP's** are used to provide high-capacity wireless broadband in point-to-multipoint (PMP) network architectures. It's primarily deployed by WISPs, utilities, and government agencies to deliver last-mile connectivity, especially in areas where fiber is not feasible.

**Contact Today  
For Current Inventory**

Visit [TELECOMCAULIFFE.com](http://TELECOMCAULIFFE.com)

✓ **REDUCING LEADTIMES**    ✓ **COST SAVINGS**    ✓ **LIFETIME WARRANTY**    ✓ **SUSTAINABLE SOLUTIONS**



**BILL MCAULIFFE**  
*Director of Sales – National Accounts*

[TEAMMCAULIFFE@PICSTELECOM.COM](mailto:TEAMMCAULIFFE@PICSTELECOM.COM) | 585.746.6383 | [TELECOMCAULIFFE.COM](http://TELECOMCAULIFFE.COM)

\* This document contains confidential and proprietary information that is the property of PICS Telecom International, which is provided for the sole purpose of permitting the recipient to respond to this Equipment Sale flyer. No part of this document is to be used without written permission by PICS Telecom. All trademarks, trade names, photos, or logos mentioned or used are the property of their respective owners and are intended solely for identification purposes.