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# Cambium C050045B031A PMP 450b Mid-Gain Subscriber (PTP Compatible)

SKU WIF-CB-00074 MPN C050045B031A

# **Description**

Cambium's 5 GHz PMP 450b subscriber module operates as a high performance wireless data receiver by connecting to a deployed PMP 450i access point.

Coupling its 40 MHz channel width with a peak modulation scheme of 256QAM the PMP 450b can provide beyond 300 Mb/s L1 throughput. The platform's SoC architecture provides a 400% increase in processing power over legacy 450 SM units.

PMP 450b is a reliable and cost effective subscriber, sporting a IP55 ingress protection rating and 40 year MTBF. The unit can also be set in PTP mode to operate as a simple 5 GHz backhaul.

## Read More

The Mid-Gain version of the 450b provides a modest 17 dBi gain making it ideal for short range point to multipoint applications. The reduced gain removes the need to fine tune or align the connection to the access point, and also provides greater tolerance to installations experiencing high wind, vibration, or moving components.

The wider beamwidth improves performance in short range non-line of sight environments, such as scenarios experiencing higher levels of multipath scatter.



### **Cambium Networks**

Cambium Networks enables service providers; enterprises; governmental and military agencies; oil, gas and utility companies; Internet service providers; and public safety organizations to build powerful communications networks, reach users from 200 kilometers across mountain tops down to their devices, and intelligently manage their business Wi-Fi infrastructure through end-to-end network ...

# **Network Interfaces**

Wireless Interfaces

Topology

Multipoint Terminal/Subscriber, Point-to-Point (P2P)

Max. Throughput

300 Mb/s

Encryption

**AES-128** 

Max. Clients

1

Latency

5 ms

Aggregate Channel Width

40 MHz

**Transmit Power** 

27 dBm

Agg. Data Rate

300 Mb/s

**Receive Sensitivity** 

-94 dBm

Agg. Channel Width

40 MHz

Wireless Bands	Mode	Start Frequency			Width	Modulation	Data Rate
5 GHz	TDD	4900 MHz	5925 MHz	<u>2x2</u> MIMO	40 MHz	256QAM	300 Mb/s

**Ethernet Interfaces** 

Interface Quantity Function Signalling PoE Input

RJ45 Copper 1 Data & PoE 100BASE-T, 1000BASE-T Cambium 30 Vdc

# **Antenna Specifications**

Start Frequency

4900 MHz

Stop Frequency

5925 MHz

Polarisation

# Dual Pol (V, H)

Input Impedance

50 Ω

Frequency Test Data

# Start Freq. Stop Freq. Peak Gain Azimuth Elevation F/B Ratio XPD

4900 MHz 5925 MHz 17 dBi 15° 30° > 20 dB > 15 dB

Polar Patterns

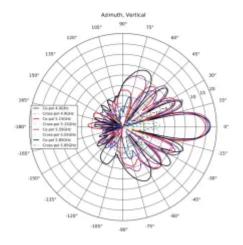
**Start Frequency** 

4900 MHz

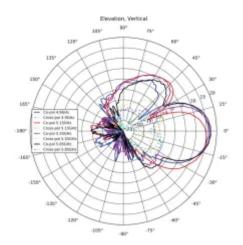
**Stop Frequency** 

5925 MHz

### **Azimuth Polar Plot**



### **Elevation Polar Plot**



# **Physical Specification**

Subtype

Wireless Bridge

Min. Operating Temperature

-40 °C

Max. Operating Temperature

60 °C

**Ingress Protection** 

IP55

**MTBF** 

> 350000 h

**Dimensions** 

120 × 248 × 125 mm

Weight

0.6 kg

Compliance/Certifications

ISO 9001 Quality Management

**Power Specifications** 

Max. Consumption

12 W

**Power Options** 

Power over Ethernet

**Typical Consumption** 

9 W

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