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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 | Path Mode | Start Frequency | Stop Frequency | MIMO | Channel Width | Modulation | Max. Data Rate |
|---|---|---|---|---|---|---|---|
| 5 GHz | TDD | 4900 MHz | 5925 MHz | 2x2 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

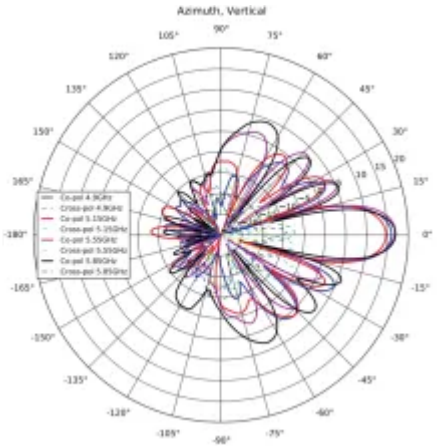
Start Frequency

4900 MHz

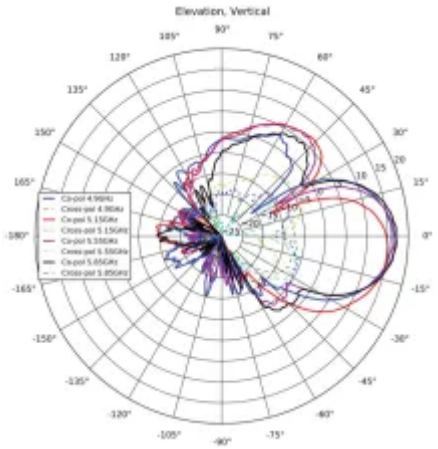
Stop Frequency

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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