

# 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.

## Network Interfaces

### Wireless Interfaces



### 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 ...



|                  |  |                          |         |
|------------------|--|--------------------------|---------|
| Topology:        | Multipoint Terminal/Subscriber, Point-to-Point (P2P) | Max. Clients:            | 1       |
| Max. Throughput: | 300 Mb/s   | Latency:                 | 5 ms    |
| Encryption:      | AES-128  | Aggregate Channel Width: | 40 MHz  |
| Transmit Power:  | 27 dBm   | Receive Sensitivity:     | -94 dBm |
| Agg. Data Rate:  | 300 Mb/s   | 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

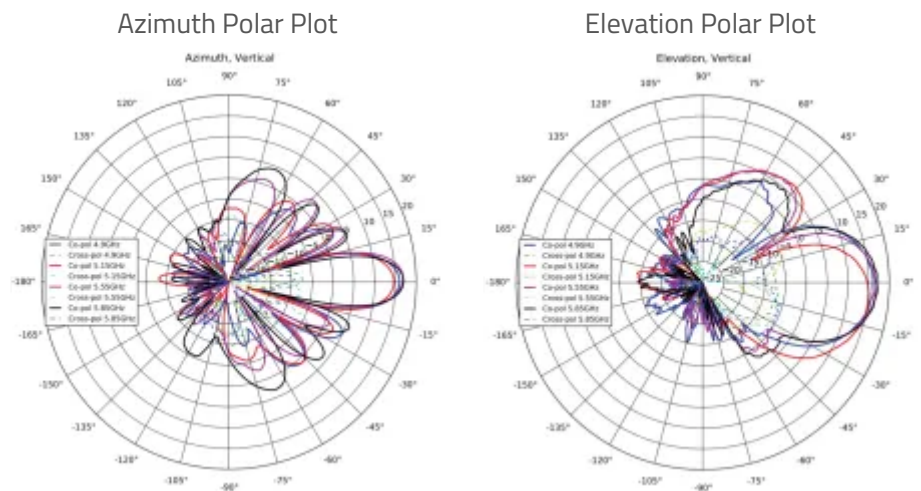
|                  |          |                  |                 |
|------------------|----------|------------------|-----------------|
| Start Frequency: | 4900 MHz | Polarisation:    | Dual Pol (V, H) |
| Stop Frequency:  | 5925 MHz | Input Impedance: | 50              |

#### 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



## Physical Specification

|                             |                 |                            |                             |
|-----------------------------|-----------------|----------------------------|-----------------------------|
| Subtype:                    | Wireless Bridge | Dimensions:                | 120 × 248 × 125 mm          |
| Min. Operating Temperature: | -40 °C          | Weight:                    | 0.6 kg                      |
| Max. Operating Temperature: | 60 °C           | Compliance/Certifications: | ISO 9001 Quality Management |
| Ingress Protection:         | IP55            |                            |                             |
| MTBF:                       | > 350000 h      |                            |                             |

Power Specifications

|                   |                     |                      |     |
|-------------------|---------------------|----------------------|-----|
| Max. Consumption: | 12 W                | Typical Consumption: | 9 W |
| Power Options:    | Power over Ethernet |                      |     |

Disclaimer: Although care has been taken to ensure the accuracy, completeness and reliability of the information provided, Powertec assumes no responsibility therefore. The user of the information agrees that the information is subject to change without notice. Powertec assumes no responsibility for the consequences of use of such information, nor for any infringement of third party intellectual property rights which may result from its use. IN NO EVENT SHALL POWERTEC BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL, OR INCIDENTAL DAMAGE RESULTING FROM, ARISING OUT OF OR IN CONNECTION WITH THE USE OF THE INFORMATION.

