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

**KEY FEATURES:**
- Ultra-wide band radios support the entire band, from 3.3 to 3.9 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.
- CBRS CBSD Category B device
- New System on a Chip (SoC) enhances Packet Processing Power more than 4x that of the 450 SM.
- Capable of up to 300 Mbps aggregate in a 40 MHz channel.
- Backhaul radios can function as a Point-to-Point (PTP) link or as a Subscriber Module (SM).
- "No Encryption" models only required for countries with export control license requirements.

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>HIGH GAIN (20 dBi)</th>
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<tbody>
<tr>
<td>Model Numbers</td>
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<tr>
<td>Global</td>
<td>C030045B021A</td>
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<tr>
<td>No Encryption</td>
<td>C030045B025A</td>
</tr>
<tr>
<td>4-pack Antenna Assembly</td>
<td>N030045D001A</td>
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</tbody>
</table>

**SPECTRUM**
- Channel Spacing: Configurable to 500 KHz increments
- Frequency Range: 3300 - 3900 MHz
- Channel Width: 5 MHz, 7 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
SPECIFICATIONS

SECURITY

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

PERFORMANCE

PPS
50,000

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 40 miles (64 km) in PMP mode. Up to 186 miles (300 km) in PTP mode

Latency
3 - 5 ms, typical

GPS Synchronization
Yes, synchronized by Access Point

Quality of Service
DiffServe QoS

LINK BUDGET

Transmit Power Range
56 dB dynamic range (to EIRP limit by region) (1 dB step)

Maximum Transmit Power
Up to +29 dBm (MIMO, combined V+H)

ANTENNA

Integrated Antenna Peak Gain
20 dBi

3 dB Beamwidth - Azimuth
12°

3 dB Beamwidth - Elevation
12°

Polarization
Dual slant, +/- 45

Front-To-Back Isolation
>30 dB

Cross Polarization
>20 dB

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 55

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
200 km/hour (124 mi/hour)

Dimensions (HxWxD) (including mount)
45 cm diameter x 28 cm (17.8” diameter x 11.2”)

Pole Diameter Range / Mechanical Tilt (w/ included mount)
2.5 - 7.6 cm (1” to 3”) ± 20 degrees mechanical tilt

Power Consumption
12 W nominal, 15 W peak

Input Voltage
20 - 32 V DC

CERTIFICATIONS

Canada (ISED)
109W-0053

FCC ID
Z8H89FT0053

ETSI
EN 302 326-2