

ePMP Sector Antenna

Cambium Networks has deployed more than five million radios around the world achieving unparalleled degrees of scalability. Based on this vast experience, Cambium Networks has designed an antenna solution that enables network operators to increase the spectral efficiency and scale of their ePMP™ point-to-multipoint (PMP) distribution access networks. Wireless Service Providers deploying networks in 5 GHz spectrum will find this sector antenna for 90° and 120° applications especially well-suited for high-density networks requiring frequency re-use and wide-band spectrum coverage.

KEY DEPLOYMENT ADVANTAGES:

- **Frequency Reuse:** Designed for ABAB channel re-use (two channels covering four sectors), the sector antenna has 35 dB front to back ratio including a wide aperture in the rear-facing direction.
- **Channel Flexibility:** Consistent gain from 4.9 to 6.0 GHz allows the operator to select a channel anywhere in the band and achieve the expected performance.
- **Consistent Coverage:** Excellent **null fill** capabilities of the antenna allow for broad geographical coverage within a sector even near the base of the tower and the edges of the sector.
- **Designed for the Installer:** Small compact design, integrated ePMP radio mount and GPS antenna integration.
- **Predictable Performance:** The sector antenna is integrated into Cambium Networks LINKPlanner. The 3D model shows coverage at all elevations and across the azimuth.

KEY SPECIFICATIONS:

- 18 dBi gain
- 4.9 to 5.97 GHz spectrum
- 35 dB front to back ratio
- IP 65 ruggedization



Specifications

PRODUCT	
Model #	C050900D021A
Frequency Range	4.9 GHz to 5.97 GHz
Gain	18 dBi
3 dB Beamwidth – Azimuth	90 degrees
6 dB Beamwidth – Azimuth	120 degrees
3 dB Beamwidth - Elevation	6 degrees
Electrical Downtilt	-2 degrees
Polarization	Horizontal and Vertical
Port-to-Port Isolation	> - 30 dB
Front-to-Back Ratio	35 dB
Maximum Input Power	5 W
Input Impedance	50 ohms
Mounting Connectors	2 x RP SMA
Mounting Hardware	Included for mounting to mast diameters 2" to 4" (5 cm to 10 cm) -10 to +5 degree tilt Hardware included to connect ePMP access point to back of antenna body
Physical Dimensions	Antenna Body: 23.4" (H) x 6.2" (W) x 4.3" (D) (594 mm x 157 mm x 110 mm) w/ ePMP 1000 Access Point: 23.4" (H) x 6.2" (W) x 5.9" (D) (594 mm x 157 mm x 150 mm)
Weight	Antenna Body: 8.8 lbs. (4.0 kg) w/ ePMP 1000 Access Point and Mounting Brackets: 14.6 lbs. (6.6 kg)
Environmental	IP65
Radome Material	UV Protected ABS
Operating Temp	-40°C to 60°C (-40°F to 140°F)
Wind Loading	Operational at ≤ 145km/hr, Survival at ≤ 209km/hr

