

# Cambium C050045C002C PMP 450i 5 GHz Subscriber, Integrated Antenna

SKU: WIF-CB-00084  
MPN: C050045C002C

## Description

Cambium's 5 GHz PMP 450i subscriber provides high performance wireless data connectivity by connecting back to a PMP 450i Access Point. The unit's integrated antenna encapsulates all RF connections within its weatherproof radome, minimising potential points of failure.

Coupling its 40 MHz channel width with a peak modulation scheme of 256QAM the PMP 450i can provide beyond 300 Mb/s L1 throughput (theoretically as high as 450 Mb/s). The 450i system touts a maximum range of 64 kilometers (subject to regulatory conditions).

PMP 450i 5 GHz is one of few industrial grade multipoint solutions. The system is the choice of major mining and telecommunications companies where performance cannot be compromised. The unit is IP67 rated for harsh operating environment and claims a mean-time-between-failure of over 40 years.

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The unit's integrated 23 dBi antenna provides high speed connectivity out to about 10 to 15 kilometres, although this is of course dependent on the required data rate and tolerated latency / jitter performance metrics.

PMP 450i is one of our favourite units for the simple fact that it does exactly what it states. There's no marketing spin, the



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## 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 ...

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## Network Interfaces

### Wireless Interfaces

Topology:	Multipoint Terminal/Subscriber	Max. Clients:	1
Max. Throughput:	300 Mb/s	Latency:	5 ms
Encryption:	AES-128	Aggregate Channel Width:	40 MHz
Transmit Power:	28 dBm		

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	PoE Output
RJ45 Copper	1	Data + PoE In	100BASE-T, 1000BASE-T	802.3at PoE+	
RJ45 Copper	1	Aux + PoE Out	100BASE-T, 1000BASE-T		802.3at PoE+

### Antenna Specifications

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

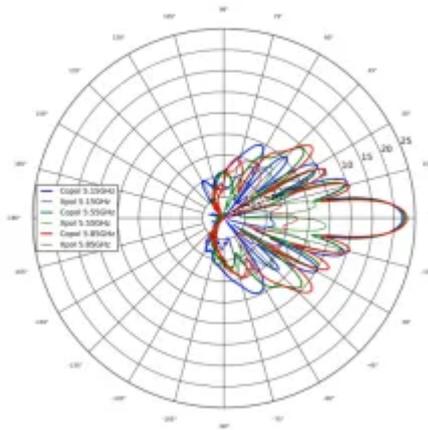
### Frequency Test Data

Start Freq.	Stop Freq.	Peak Gain	Azimuth	Elevation	XPD
4900 MHz	5925 MHz	23 dBi	10°	10°	> 15 dB

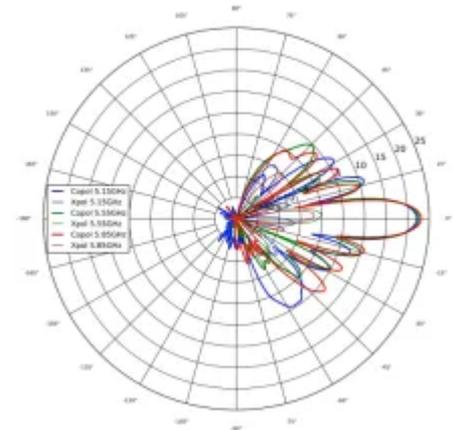
### Polar Patterns

Start Frequency: 5150 MHz  
Stop Frequency: 5850 MHz

Azimuth Polar Plot



Elevation Polar Plot



# Physical Specification

Subtype:	Wireless Bridge	Dimensions:	64 × 310 × 310 mm
Min. Operating Temperature:	-40 °C	Weight:	2.5 kg
Max. Operating Temperature:	60 °C	Materials:	Aluminium Die Cast
Ingress Protection:	IP67	Mounting:	Cambium 4/8-Bolt Pattern
MTBF:	> 350000 h	Compliance/Certifications:	R-NZ , RCM
Power Specifications			
Max. Consumption:	18 W	Typical Consumption:	15 W
Power Options:	Power over Ethernet		

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