Powertec Wireless Technology
ABN: 42 082 948 463
PO Box 1034, Ashmore City
Queensland, Australia, 4214
sales@powertec.com.au
1300 769 378

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 system is installed and provides continuous high speed wireless connectivity for decades. The AP is rock solid and operates in just about any environmental condition.

A unique feature is its FPGA design, allowing future firmware releases to upgrade performance.

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Cambium™ Networks

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
Max. Throughput
300 Mb/s
Encryption
AES-128
Max. Clients
1
Latency
5 ms
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

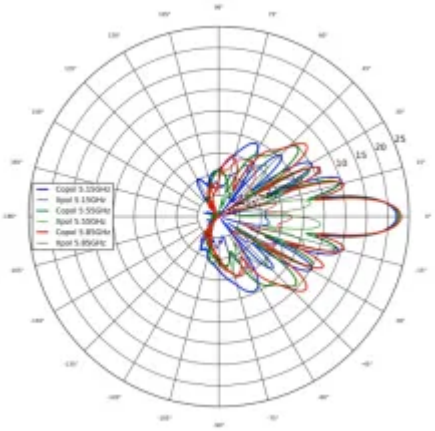
Start Frequency
4900 MHz
Stop Frequency
5925 MHz
Polarisation
Dual Pol (V, H)

Input Impedance
50 Ω
Frequency Test Data

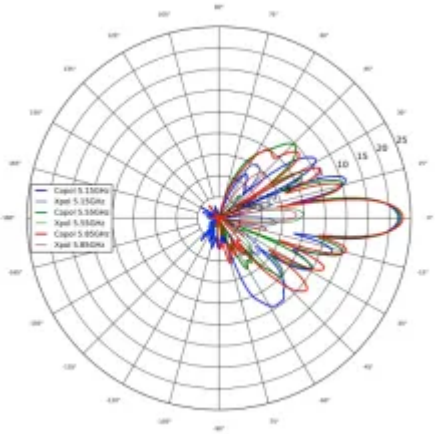
Start Freq.	Stop Freq.	Peak Gain	Azimuth	Elevation	XPD
4900 MHz	5925 MHz	23 dBi	10°	10°	> 15 dB

Polar Patterns
Start Frequency
5150 MHz
Stop Frequency
5850 MHz

Azimuth Polar Plot



Elevation Polar Plot



Physical Specification

Subtype
Wireless Bridge
Min. Operating Temperature
-40 °C

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