

# Cambium C050045A101A PMP 450m Medusa 5 GHz Integrated Access Point (ROW)

SKU: WIF-CB-00113  
MPN: C050045A101A

## Description

Cambium's release of the PMP 450m Medusa became arguably one of the most significant advances in multipoint wireless of the decade.

Designed as a drop-in replacement of legacy PMP 450 and 450i access points, the PMP 450m provides a serious network capacity increase in a matter of hours.

The 5 GHz PMP 450m uses its cnMedusa Massive MIMO technology (14T14R MU-MIMO) to deliver aggregate capacity of 1.2 Gb/s in a 40 MHz channel. The system provides an unmatched 60 b/Hz spectral efficiency supporting adaptive modulation up to 256QAM.

The system uses beamforming and beamsteering to isolate and track client radios, and establish 14 spatial streams to 7 simultaneous users resulting in exceptional performance in noisy RF environments.

Read More

The Cambium Medusa PMP 450m allows your team to deliver exceptional data rates in highly dynamic environments such as in mining. The unit provides unmatched performance in the 5 GHz band.

With a MTBF of >40 years the unit is rock solid and unwavering throughout its lifecycle, just as engineers have come



Network Interfaces  
**Cambium Networks™**

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:	Point-to-Multipoint (P2MP)	Max. Clients:	238
Max. Throughput:	1200 Mb/s	Latency:	10 ms
Encryption:	AES-128	Aggregate Channel Width:	40 MHz
Transmit Power:	29.7 dBm	Receive Sensitivity:	-94 dBm
Agg. Data Rate:	1200 Mb/s	Agg. Channel Width:	40 MHz
Beamforming:	2DBF		

Wireless Bands	Path Mode	Start Frequency	Stop Frequency	MIMO	Channel Width	Modulation	Max. Data Rate
5 GHz	TDD	5150 MHz	5925 MHz	Massive MIMO	40 MHz	256QAM	171 Mb/s

#### Ethernet Interfaces

Interface	Quantity	Function	Signalling	PoE Input	PoE Output
RJ45 Copper	1	Data & PoE	100BASE-T, 1000BASE-T	802.3at PoE+	
RJ45 Copper	1	Aux with PoE Output	100BASE-T, 1000BASE-T		802.3at PoE+

#### Antenna Specifications

## Beamforming Array

Start Frequency:	4940 MHz	Polarisation:	Dual Pol (V, H)
Stop Frequency:	5925 MHz	Input Impedance:	50

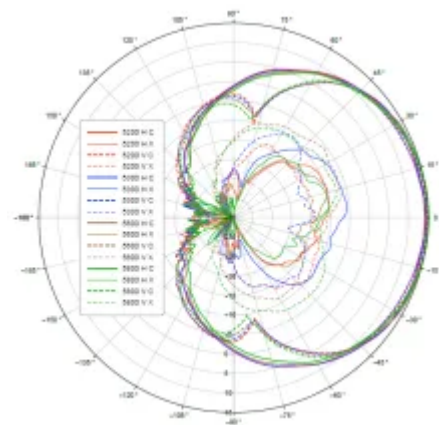
#### Frequency Test Data

Start Freq.	Stop Freq.	Peak Gain	Azimuth	Elevation
4940 MHz	5925 MHz	15.3 dBi	90°	8°

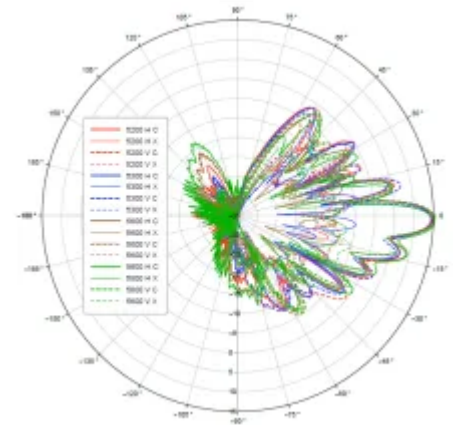
#### Polar Patterns

Start Frequency: 5200 MHz  
Stop Frequency: 5800 MHz

Azimuth Polar Plot



Elevation Polar Plot



# Physical Specification

Subtype:	Wireless Bridge	Dimensions:	110 × 650 × 520 mm
Min. Operating Temperature:	-40 °C	Weight:	14.2 kg
Max. Operating Temperature:	60 °C	Materials:	Aluminium
Ingress Protection:	IP67	Compliance/Certifications:	R-NZ
MTBF:	> 350000 h	RCM	'

## Power Specifications

Max. Consumption:	80 W	Typical Consumption:	70 W
Power Options:	Power over Ethernet		

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