

PMP 450i Access Point

Cambium Networks industry-leading 450 platform includes the all new PMP 450i and PTP 450i radios. The 450i product platform is the most scalable industrial-grade wireless broadband solution available.

Kev Features:

- An **ultra-wide band** radio supports 4900 MHz to 5925 MHz with dynamic interference filtering, improved transmit power and better receive sensitivity.
- **Rugged metal enclosure** designed to meet IP-66 and IP-67 standards to withstand harsh environments. Optional ATEX/HAXLOC certified models available for hazardous deployments.
- **Dynamic Interference Filtering** to provide industry leading noise isolation for improved performance
- Updated FPGA and SoC architecture triples the processing power compared to PMP 450
- Multifunction AUX port allows for greater flexibility for deployment by adding a camera or other PoE directly.
- Option with new **Integrated 90 degree sector antenna** optimized for frequency re-use (>35 dB F/B), high gain, null fill and predictable performance.



PRODUCT							
		RoW	US	EU	DES only	IC	
Model Numbers	Connectorized	C050045A001A	C050045A002A	C050045A003A	C050045A004A	C050045A015A	
	Integrated 90° sector	C050045A005B	C050045A006B	C050045A007B	C050045A008B	C050045A016B	
SPECTRUM							
Channel Spacing	Configurable on 2.5 MHz incren	Configurable on 2.5 MHz increments					
Frequency Range	4900 - 5925 MHz						
Channel Width	5 MHz, 10 MHz, 15 MHz, 20 MHz	, or 30 MHz					

Tilt Bracket Assembly (part # N000045L002A) for Connectorized version only, Integrated AP mounting included

Mounting

Specifications

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, UDP, TCP, IP, ICMP, Telnet, SNMP, HTTP, FTP				
Network Management	HTTP, HTTPS, Telnet, FTP, SNMP v3				
VLAN	802.1ad (DVLAN Q-inQ), 802.1Q with 802.1p priority, dynamic port VID				
PERFORMANCE					
Subscriber Per Sector	Up to 238				
ARQ	Yes				
Modulation Levels (Adaptive)	MCS	MCS Signal to Noise Required (SNR, in dB)			
2X	QPSK	10			
4X	16QAM	17			
6X	64QAM	24			
8X	256QAM	32			
Maximum Deployment Range	Up to 40 miles (64 km)	Up to 40 miles (64 km)			
Latency	3 - 5 ms, typical	3 - 5 ms, typical			
GPS Synchroization	Yes, via Autosync (CMM4)				
Quality of Service	Diffserve QoS				
LINK BUDGET					
Antenna Beam Width	90° (3dB rolloff) sector for integra	90° (3dB rolloff) sector for integrated (Dual polarity, H+V)			
Antenna Gain	17 dBi ± 1 dBi integrated 90° sector or external				
Transmit Power Range	40 dB dynamic range (to EIRP limit by region) (1 dB step)				
Maximum Transmit Power	+27 dBm combined output	+27 dBm combined output			
PHYSICAL					
Antenna Connection	50 ohm, N-Type (Connectorized version only)				
Surge Suppression (LPU fitted)		EN61000-4-5: 1.2us/50us, 500 V voltage waveform Recommended external surge suppressor: Cambium Networks Model # C000000L033A			
Mean Time Between Failure	> 40 Years	> 40 Years			
Environmental	IP67, IP66	IP67, IP66			
Temperature / Humidity	-40°C to +60°C (-40°F to +140°F)	-40°C to +60°C (-40°F to +140°F), 0-95% non-condensing			
Weight	Connectorized	Approx. 2.0 kg (4.5 lbs)			
	Integrated	Approx. 7.5 kg (16.5 lbs)			
Wind Survival	Connectorized	322 km/h (200 mi/h)			
	Integrated	200 km/h (124 mi/h)			
Dimensions (HxWxD)	Connectorized	26.0 x 13.4 x 6.4 cm (10.3" x 5.3" x 3.3")			
	Integrated	59.7 x 16.2 x 15.2 cm (23.5" x 6.4" x 6")			
Power Consumption	15 W typical, 25 W max, 55 W max with Aux port PoE out enabled				
Input Voltage	48-59 V DC, 802.3at compatible				
Mounting	Tilt Bracket Assembly (part # N000045L002A) for Connectorized version only, Integrated AP mounting included				

SECURITY			
Encryption	56-bit DES, FIPS-197 128-bit AES		
CERTIFICATIONS			
Industry Canada	109AO-50450I (4.9, 5.2, 5.4, 5.8 GHz)		
FCC ID	QWP-50450I (4.9, 5.1, 5.2, 5.4, 5.8 GHz)		
CE	EN 301 893 v1.7.1 (5.4 GHz)		
	EN 302 625 v1.1.1 (Broadband Disaster Relief, 4.9 GHz, 5.1 GHz)		
	EN 302 502 v1.2.1 (5.8 GHz)		

ANTENNA PATTERN FOR INTEGRATED SECTOR:

