

PMP 450d Integrated Dish Subscriber Module

The Cambium Networks PMP 450 is our industry-leading wireless access network platform. The PMP 450d Integrated Dish Subscriber Module utilizes the PMP 450 platform capabilities in a new, rugged, high gain design.

Key Features:

- 25 dBi integrated dish
- Works with existing power supplies
- Easy to assemble and deploy
- Available in 5 GHz



PMP 450d Integrated Dish Subscriber Module

PRODUCT

MODEL NUMBERS		40 Mbps	UNCAPPED
	5 GHz	C054045H013B (4-PACK)	C054045H014B (4-PACK)

SPECTRUM

FREQUENCY RANGE	5470 - 5875 MHz
CHANNEL WIDTH	5 MHz, 10 MHz, 15 MHz, 20 MHz or 30 MHz
CHANNEL SPACING	Selectable on 2.5 MHz increments

INTERFACE

MAC (MEDIA ACCESS CONTROL) LAYER	Cambium Networks proprietary
PHYSICAL LAYER	2x2 MIMO OFDM
ETHERNET INTERFACE	10/100/BaseT, half/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

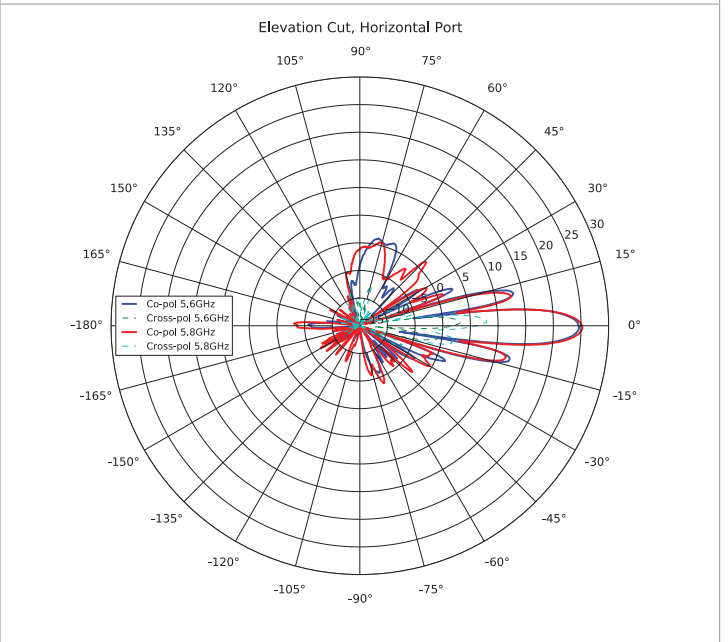
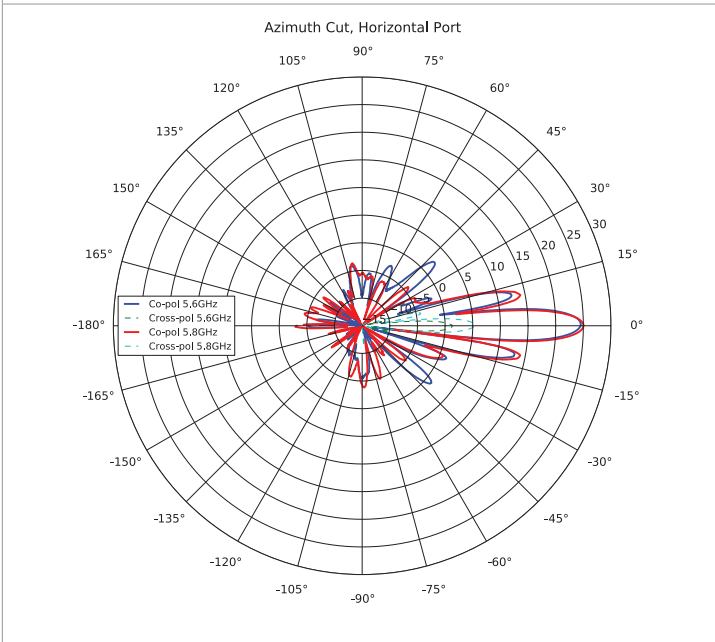
PERFORMANCE		
ARQ	YES	
MODULATION LEVELS (ADAPTIVE)	MODULATION	SIGNAL TO NOISE REQUIRED (SNR, in dB)
2X	QPSK	10
4X	16-QAM	17
6X	64-QAM	24
8X	256-QAM	32
MODULATION MODES (DYNAMIC)	Dual Payload (higher throughput) MIMO-B or Single Payload (polarity diversity) MIMO-A	
MAXIMUM DEPLOYMENT RANGE	Up to 40 miles	
LATENCY	3 - 5 ms, typical	
GPS SYNCHRONIZATION	Yes, via Autosync (CMM3, CMM4, uGPS, iGPS)	
QUALITY OF SERVICE	Diffserv QoS	
LINK BUDGET		
ANTENNA SPECIFICATIONS	7° azimuth , 7° elevation , >30 dB front-to-back isolation	
INTEGRATED DISH GAIN	25 dBi	
TRANSMIT POWER RANGE	-30 TO +22 dBm (combined, to EIRP limit by region) (1 dB interval)	
MAXIMUM TRANSMIT POWER	+22 dBm combined	
PHYSICAL		
ANTENNA CONNECTION	Integrated dish antenna	
SURGE SUPPRESSION	IEC 61000-4-2 (ESD) 15kV (AIR), 8kV (contact) IEC 61000-4-4 (EFT) 40A (5/50 ns) IEC 61000-4-5 (LIGHTNING) 100A (8/20 μs)	
MEAN TIME BETWEEN FAILURE	> 40 Years	
ENVIRONMENTAL	IP55	
TEMPERATURE	-40°C TO +60°C (-40°F TO 140°F), 0-95% non-condensing	
WEIGHT	3.5 kg (7.7 lbs)	
DIMENSIONS	Dish diameter – 47 cm (16.8 inches with Radome) Depth - 17 cm (6.6 inches)	
TYPICAL POWER CONSUMPTION	9 W	
MAXIMUM POWER CONSUMPTION	12 W	
INPUT VOLTAGE	20 TO 32 V	
WIND SURVIVAL SPEED	145 km/h (90 mph)	
WIND LOADING (@145 KM/H (90 MPH) FRONT)	197N (44.3 lbf)	
WIND LOADING (@145 KM/H (90 MPH) SIDE)	65.5N (14.7 lbf)	
MOUNTING POLE SIZE (RANGE)	25.4mm to 76.2mm (1" to 3")	
MECHANICAL DOWNTILT	-30° to +30°	
SHIPPING CARTON (4-PACK) - SIZE	500 mm x 500 mm x 380 mm	
SHIPPING CARTON (4-PACK) - WEIGHT	20 kg (44 lbs)	
SECURITY		
ENCRYPTION	56-bit DES, FIPS-197 128-bit AES	
CERTIFICATIONS		
INDUSTRY CANADA	109W-0001 (5.4, 5.8 GHz)	
FCC ID	Z8H89FT0001 (5.4, 5.8 GHz)	
CE	EN 301 893 V1.7.1 (5.4 GHz)	

AZIMUTH PATTERNS

ELEVATION PATTERNS

H-POL AZIMUTH GAIN (DBI)

H-POL ELEVATION GAIN (DBI)



V-POL AZIMUTH GAIN (DBI)

V-POL ELEVATION GAIN (DBI)

