Cambium Networks™

ePMP™ 1000
6.4 GHz CSM

The ePMP 1000 CSM product now supports a new model that offers frequency ranges from 5.9 to 6.4GHz. Packaged in a connectorized fashion, this unit now offers the ability to connect a high gain 3rd party antenna and use this as a high gain low cost 6.4 subscriber module in a point to multipoint environment. In addition the same unit can be used as a point to point product while accessorizing it with a 3rd party antenna solution. The CSM product also features two ethernet ports with the second ethernet port serving as a switch and PoE out.

ePMP 1000 6.4 GHz CSM

MAIN DIFFERENTIATORS

- **Quality of Service (QOS)** allows you to confidently offer triple play services – VoIP (Voice over IP), video and data. Providing your customers with excellent service quality ensures their continued loyalty and transforms them into advocates, helping WISPs and enterprises expand their business.

- **Proven reliability** has created an unsurpassed connectivity standard in many industries that depend on fixed wireless broadband. Our products undergo rigorous testing and are made from high-quality components.

POWERFUL FEATURES

The Cambium Networks ePMP 1000 6.4GHz CSM provides more than 200 Mbps of real user throughput. Using 2x2 MIMO-OFDM technologies, ePMP deployments achieve industry leading data rates.

When deployed with a sector antenna, the ePMP 1000 CSM can be configured as an Access Point serving ePMP Integrated Radios configured as Subscriber Modules. When deployed with a high gain point to point antenna, the ePMP1000 CSM Radio can be configured as a Backhaul Master, forming a PTP link with another ePMP Radio module.

SPECIFICATIONS

PRODUCT

Model Number	6.4 GHz: C060900A221A (RoW) (EU Power cord)

SPECTRUM

Channel Spacing	Configurable on 5 MHz increments
Frequency Range	5 GHz – 6.4 GHz: 5920 – 6420 MHz (exact frequencies as allowed by local regulations)
Channel Width	5 | 10 | 20 | 40 MHz

INTERFACE

MAC (Media Access Controller) Layer	Cambium Proprietary
Physical Layer	2x2 MIMO/OFDM
Ethernet Interface	100/1000BaseT, rate auto negotiated (802.3af compliant)
Powering Methods Supported	30V PoE Supply (included), CMM5, 802.3af PoE Supply
Protocols Used	IPv4, UDP, TCP, IP, ICMP, SNMPv2c, HTTPs, STP, SSH, IGMP Snooping
Network Management	HTTPs, SNMPv2c, SSH
VLAN	802.1Q with 802.1p priority

PERFORMANCE

Subscribers Per Sector	Up to 120
ARQ	Yes
Nominal Receive Sensitivity (w/ FEC) @ 20MHz Channel	MCS0 = -93 dBm to MCS15 = -69 dBm (per branch)
Nominal Receive Sensitivity (w/ FEC) @ 40MHz Channel	MCS0 = -90 dBm to MCS15 = -66 dBm (per branch)
Modulation Levels (Adaptive)	MCS0 (BPSK) to MCS15 (64QAM 5/6)
Quality of Service	Three level priority (Voice, High, Low) with packet classification by DSCP, COS, VLAN ID, IP & MAC Addr, Broadcast, Multicast and Station Priority

LINK BUDGET

Antenna	Optional 3rd Party Antennas Available http://www.mars-antennas.com/MA-WD62-DP16 http://www.mars-antennas.com/MA-WC62-DP17 http://rfeng.ru/catalog/230.htm http://itelite.net/antennas/PRO-SEC6418DP
Transmit Power Range	Up to 30 dBm (5960-6160) 24dBm (6160-6400)

PHYSICAL

Antenna Connection	50 ohm, RP (Reverse Polarity) SMA
Surge Suppression	1 Joule Integrated
Environmental	IP55
Temperature	-30°C to +60°C (-22°F to +140°F)
Weight	5.1 kg (10 lbs) with antenna 0.52 kg (1.1 lbs) without antenna
Wind Survival	145 km/hour (90 mi/hour) with antenna
Dimensions (H x W x D)	Radio: 26.9 x 11 x 7.7 cm (10.6 x 4.3 x 3.0 in) AAntenna (incl brackets): 80cm x 22.5cm x 24cm (31.5 x 8.9 x 9.4 in)
Power Consumption	10 W Maximum, 7.5 W Typical
Input Voltage	up to 30 V

SECURITY

Encryption	128-bit AES (CCMP mode)