ePMP™ 1000 GPS Sync Radio

Network operators are challenged to deliver reliable connectivity in overcrowded RF environments. As available spectrum becomes more congested, having the right broadband access solution that allows network operators to deliver efficient quality cost effectively, is vital for all types of deployments.

Maximize network performance using ePMP software with eFortify™ and eCommand™ features and tools. eFortify enhances the performance of the ePMP 1000 in high noise environments. eCommand provides a suite of management features and tools to assist network operators in planning, provisioning and monitoring of their network. The ePMP 1000 GPS Sync Radio provides flexibility to grow from a single sector deployment to complex multi-sector / multi-site deployments, as the subscriber base expands.

Available in both 5 GHz and 2.4 GHz frequency bands the platform delivers high performance and reliable broadband connectivity to customers, with services such as VoIP, video and data. The ePMP 1000 is the most effective connectivity solution for reaching the under-and unconnected around the world.

ePMP 1000 GPS Sync Radio

Main Differentiators

» **INNOVATIVE GPS SYNC TECHNOLOGY** enables unparalleled spectrum efficiency. This allows for the configuration of more subscribers in your network while preserving consistency and quality of service in spectrum-constrained environments. GPS Sync leads directly to CAPEX and OPEX reductions, resulting in lower installation costs and maintenance, allowing your business to concentrate on growth and profitability..

» **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 GPS Sync Radio provides more than 200 Mbps of real user throughput. Using 2x2 MIMO-OFDM technologies, ePMP deployments achieve industry leading data rates.

Utilizing GPS sync, the ePMP is an ideal fit for networks that require capacity and reliability for superior QoS in remote and underserved areas. This integrated PTP and PMP solution features an efficient GPS synchronized operational mode that permits highly scalable frequency reuse.

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

Specifications

Product	
SALES MODEL NUMBER	5 GHz: C058900P112A/C058900A112A (US/FCC), C050900P013A/C050900A013A (EU), C050900P011A/C050900A011A (Other) 2.4 GHz: C024900P011A/C024900A011A

Spectrum	
CHANNEL SPACING	Configurable on 5 MHz increments
FREQUENCY RANGE	5 GHz: 4910 – 5970 MHz (exact frequencies as allowed by local regulations) 2.4 GHz: 2402 – 2472 MHz
CHANNEL WIDTH	5 | 10 | 20 | 40 MHz

Interface	
MAC (MEDIA ACCESS CONTROL) 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), CMM3 & CMM4, 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)
GPS SYNCHRONIZATION	Yes, via Internal GPS, CMM3, or CMM4
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	Sector Antennas available
TRANSMIT POWER RANGE	-17 to +30 dBm (combined, to regional EIRP limit) (1 dB interval)

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 (over 100m CAT5 cable)	10 W Maximum, 7.5 W Typical
INPUT VOLTAGE	23 to 56 V

Security	
ENCRYPTION	128-bit AES (CCMP mode)

Certifications	
FCCID	2.4 GHz: Z8H89FT0012 / 5 GHz : Z8H89FT0012
INDUSTRY CANADA CERT	2.4 GHz: 109W-0012 / 5 GHz : 109W-0012
CE	5 GHz: EN 302 502 v1.2.1 5 GHz: EN 301 893 v1.7.1