Cambium Networks™

ePMP | elevate

*e*PMP Elevate solves the network migration challenge for service providers worldwide, offering an affordable, easy and fast way to upgrade an existing deployed 802.11n-based outdoor fixed wireless broadband network to the next level of performance.

The ePMP Elevate solution consists of an ePMP access point, ePMP elevate software and existing deployed non-Cambium 802.11n-based subscriber hardware. By remotely upgrading the deployed subscriber hardware with the ePMP Elevate software and licensing the ePMP access point for the required number of ePMP Elevate subscribers, you can benefit from all the signature capabilities of ePMP without switching out a single piece of subscriber hardware.

From frequency reuse enabled by GPS Synchronization for rock-solid scalability to Smart Beamforming and Intelligent Filtering for industry-leading interference tolerance, your whole network benefits instantly from the signature capabilities of the ePMP platform.

As well as making your current network work better than ever, ePMP Elevate also means you can expand your existing sectors in terms of service offerings to customers and number of subscribers per sector.

No new subscriber hardware and remote software upgrade to ePMP Elevate makes network migration an affordable reality for the first time. Take your network – and your business – to the next level with ePMP Elevate.

KEY ADVANTAGES:

- **Industry-Leading Interference Tolerance:** Intelligent Filtering hardens your network to strong off-channel interferers. Smart Beamforming with the optional Smart Antenna delivers dramatic performance improvements when dealing with strong co-channel interference. Result? Happier customers.

- **Frequency Reuse:** GPS Synchronization and Transmit Power Control allow for industry-leading Frequency Reuse.

- **Unmatched Performance and Scalability:** With the efficient ePMP MAC protocol and advanced air-fairness scheduler up to 120 simultaneously active Subscriber Modules can be served without performance degradation.

KEY SPECIFICATIONS:

- Supports up to 120 Subscriber Modules per Access Point

- Supports a wide range of 3rd party Subscriber Modules

- Industry-leading Scalability, Performance and Features

Specifications

PRODUCT

Part #	See table below for full set of Part Numbers

SPECTRUM

Channel Spacing	Configurable on 5 MHz increments
Frequency Range	5150 – 5970 MHz (exact frequencies as allowed by local regulations and underlying hardware)
Channel Width	5	10	20	40 MHz

INTERFACE

MAC (Media Access Control) Layer	Cambium Proprietary and optionally standard 802.11n
Protocols Used	IPv4, UDP, TCP, IP, ICMP, SNMPv2c, HTTPs, STP, SSH, IGMP Snooping, LLDP, DHCP, RADIUS, NTP
Network Management	HTTPs, SNMPv2c, SSH, Cambium Networks cnMaestro™
VLAN	802.1Q with 802.1p priority

PERFORMANCE

Subscribers per Sector	Up to 120
ARQ	Yes
Modulation Levels (Adaptive)	MCS0 (BPSK) to MCS15 (64QAM 5/6)
GPS Synchronization	Yes, via Internal GPS or CMM4 with 56 V and 5 pin to 7 pin cross over cable adapter
Quality of Service	Three level priority (Voice, High, Low) with packet classification by DSCP, COS, VLAN ID, IP & MAC Address, Broadcast, Multicast and Station Priority

SECURITY

Encryption	128 bit AES (CCMP mode)

COMPATIBILITY

ePMP AP Models	ePMP 2000 Full and ePMP 1000 Full 5 GHz Access Points (Lite models not supported)
ePMP AP Frequencies	5 GHz (2.4 GHz support planned for Q2 2017)

Part Numbers

C050900S501A	ePMP Elevate: 1 Subscriber License
C050900S510A	ePMP Elevate: 10 Subscriber License

Supported Model List (as of Release 3.2)*

Loco M5 WX	Available
Loco M5 XM	Available
NanoStation M5 XW	Available
NanoStation M5 XM	Available
NanoBridge M5 XM	Available
Rocket M5 XM	Available
Rocket M5 XW	Available
PowerBeam M5 XW	Available
airGrid M5HP XW	Available
airGrid M5 XM	Available
NanoBeam M5 XW	Available
Mikrotik	Future Release
Deliberant	Future Release
Other 3rd Party Equipment	Future Release

*Check release notes for each release to ensure your model is supported.