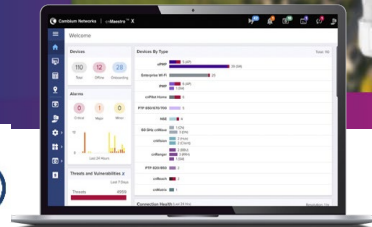


ePMP 3000L FSR Access Point

ePMP 3000L FSR AP Quick Look

- 2x2 MIMO support with peak throughput of 600 Mbps
- 256QAM-5/6, 80 MHz support
- 4910 to 5950 MHz
- Frequency reuse with GPS sync and interference mitigation
- Supports up to 64 subscriber modules
- Connectorized for use with Cambium 90°/120° sector antennas & RF Elements TwistPort™ Adaptor for ePMP™



High-Performance Connectivity with Flexible Deployment Options

Cambium Networks' ePMP product line has set the standard for high performance, scalability, and reliability in harsh interference environments, all at a compelling price. The ePMP 3000L FSR Access Point (AP) is the third-generation AP that carries on the interference tolerance mechanisms with an emphasis on high-performance, low-density point-to-multipoint sectors.

The ePMP 3000L FSR is a 2x2 MIMO connectorized access point that can support a wide variety of deployments, including 90°/120° sectors, narrow sector horns, or even 360° omni coverage.

Additionally, it continues interference mitigation techniques with support of TDD synchronization using GPS and ePMP's robust software.

The ePMP 3000L FSR AP system consists of the ePMP 3000L FSR AP, an optional 2x2 sector antenna, and a wide variety of subscriber modules (SM) with varying form factors and link budgets

Key Advantages

- **Frequency Reuse:** Supports GPS synchronization and SM transmit power control to allow for frequency reuse.
- **Unmatched Performance and Scalability:** With the efficient Cambium MAC protocol and advanced air-fairness scheduler, the ePMP 3000L FSR supports high performance and low consistent latency to subscribers.

ePMP 3000L FSR Access Point

Spectrum

Channel Spacing	Configurable on 5 MHz increments
Frequency Range	5100–5980 MHz (exact frequencies as allowed by local regulations)
Channel Width	20 40 80 MHz

Interface

MAC (Media Access Control) Layer	Cambium proprietary
Physical Layer	2x2 MIMO/OFDM
Ethernet Interfaced	100/1000BaseT, rate auto-negotiated
Powering Methods Supported	29V Cambium PoE (included)
Protocols Used	IPv4/IPv6, UDP, TCP, ICMP, SNMPv2c, HTTPS, STP, SSH, IGMP Snooping
Network Management	HTTPS, SNMPv2c, SSH
VLAN	802.1Q with 802.1p priority

Performance

ARQ	Yes
Nominal Receive Sensitivity (w/FEC) @ 20 MHz Channel	MCS0 = -89 dBm to MCS8 (256 QAM-3/4) = -66 dBm (per chain)
Nominal Receive Sensitivity (w/FEC) @40 MHz Channel	MCS0 = -87 dBm to MCS9 (256QAM-5/6) = -64 dBm (per chain)
Nominal Receive Sensitivity (w/FEC) @80 MHz Channel	MCS0 = -84 dBm to MCS9 (256QAM-5/6) = -59 dBm (per chain)
Modulation Levels (Adaptive)	MCS0 (BPSK) to MCS 9 (256QAM 5/6)
GPS Synchronization	MCS0 (BPSK) to MCS 9 (256QAM 5/6)
Quality of Service (QoS)	3-level priority (voice, high, low) with packet classification by DSCP; COS; VLAN ID; IP & MAC address; broadcast, multicast, and station priority; MIR/CIR support

Link Budget

Antenna	90°/120° degree 2x2 sector antenna (C050900D021B)
Transmit Power Range	0 to +29 dBm (combined, to regional EIRP limit) (1 dB interval)

ePMP 3000L FSR Access Point

Physical

Sector Antenna Connection	2x50 ohm, RP (reverse polarity) SMA Also compatible with RF Elements TwistPort Adaptor for ePMP
GPS Antenna Connection	1x50 ohm, RP (reverse polarity) SMA Optional external GPS Puck Antenna (N000900L030A)
Surge Suppression	1 joule integrated 30V Gigabit Surge Suppressor (C000000L065A) recommended for optimal surge protection
Environmental	IP67 and IP68 compliant
Temperature	-22°F to +140°F (-30°C to +60°C)
Power Consumption	12W (up to 15W in extreme cold temperatures when heater activated)
Input Voltage	30V nominal (14V to 30V range) Note that 14V minimum must be maintained at radio connector under all conditions, including long cable lengths
Weight	0.5 kg (1.1 lb) without bracket
Dimensions	84 x 223 x 32 mm (3.3 x 8.8 x 1.3 in) without brackets

Security

Encryption	128 bit AES (CCMP mode)
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Certifications

FCCID	Z8H-89FT0047
Industry Canada	109W-0047
CE	EN 301 893 V2.1.1 (5.4 GHz), EN 302 502 V2.1.1 (5.8 GHz)

Ordering Information

C050911A121A	ePMP 3000L 5 GHz Access Point Radio FSR 5.1-5.98 GHz (ROW) (US cord)
C050911A221A	ePMP 3000L 5 GHz Access Point Radio FSR 5.1-5.98 GHz (ROW) (EU cord)

ABOUT CAMBIUM NETWORKS

Cambium Networks enables service providers, enterprises, industrial organizations, and governments to deliver exceptional digital experiences and device connectivity with compelling economics. Our ONE Network platform simplifies management of Cambium Networks' wired and wireless broadband and network edge technologies. Our customers can focus more resources on managing their business rather than the network. We make connectivity that just works.

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