ePMP 3000 FSR 5.1–5.9 GHz

ePMP 3000 FSR Quick Look

- High-performance, scalable and reliable access points for fixed wireless broadband
- MU-MIMO for up to 1.2 Gbps capacity for more than 120 subscribers
- Low TCO with 3-year hardware warranty
- Interoperable with all Force 300 Subscriber Modules and supports backward compatibility to Force 180/200/200L

High Performance, Scalability, Reliability

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 3000 FSR 5.1–5.9 GHz series of access points (AP) is the third generation based on 802.11ac Wave 2 techology. These APs interoperate with Force 300 Subscriber Modules (SM) and support backward compatiblity.

ePMP 3000 APs can deliver up to 600 Mbps aggregate to each Force 300 SM. A sophisticated scheduling and QoS engine combined with TDD synchronization allows the it to deliver consistently high-quality service plans to a large number of end users.

ePMP 3000 FSR 5.1–5.9 GHz can deliver 1.2 Gbps serving 120 or more subscribers. Featuring 4x4 MU-MIMO and dual overlapping sectors, this AP can transmit to 2 SMs at the same time, effectively doubling the capacity of 2x2 systems and in the process, increasing link budgets by 3 dB with downlink beamsteering.

The AP can be fitted with either a 90º MU-MIMO sector antenna or a 60º MU-MIMO horn antenna. For additional interference mitigation, the AP supports dynamic filtering for neighboring channel interference. With TDD synchronization, ePMP 3000 networks can scale to thousands of end users leveraging a small number of channels

cnMaestro Network Management

All ePMP 3000 APs are managed with cnMaestro™ Network Management (free cnMaestro or subscription cnMaestro X), and networks can be planned easily and accurately with our free LINKPlanner.
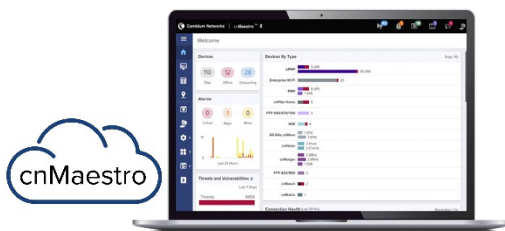
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Access Point Specifications

Channel Width	10| 20	40	80 MHz
Proprietary Physical Layer	4x4 MUMIMO/OFDM
Channel Spacing	Configurable in 5 MHz increments
Frequency Range*	Wide-band operation 5100–5970 MHz
MAC Layer (Media Access Control)	Cambium proprietary
Ethernet Interfaced	100/1000 BaseT, rate auto negotiated, 802.3at compliant and Aux SFP port
Supported Powering Methods	56 V PoE (included), standard 802.3at PoE Supply, or CMM5 with 56 V and 5 pin to 7 pin crossover cable adapter
Protocols Used	IPv4/IPV6 , UDP, TCP, IP, ICMP, SNMPv2c, HTTPs, STP, SSH, IGMP snooping
Network Management	HTTPS, SNMPv2c, SSH
VLAN	802.1Q with 802.1p priority

*Allowable frequencies and bands are dictated by individual country regulations.

Performance

Subscribers per Sector	Up to 120
ARQ	Yes
Nominal Receive Sensitivity (w/FEC) **@20 MHz Channel**	MCS 0 -92 MCS 9 -68
Nominal Receive Sensitivity (w/FEC) **@40 MHz Channel**	MCS0 -89 MCS9 -64
Nominal Receive Sensitivity (w/FEC) **@80 MHz Channel**	MCS0 -86 MCS9 - 61
Modulation Levels (Adaptive)	MCS 0 (BPSK) to MCS 9 (256 QAM-5/6)
GPS Synchronization	Yes, via internal GPS or Cambium Sync
QoS (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 DS0 DSF

Link Budget

Transmit Power Range	0 to +32 dBm (combined, to regional EIRP limit) (1 dB interval)
Antenna	Sector antenna available: Part # C050910D301A Optional smart antenna for UL beamforming: Part #C050900D020A

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Physical	
Surge Suppression*	1 joule integrated
Environmental	IP55
Temperature	-30°C to 55°C (-22°F to 131°F)
Weight	0.7 kg (1.5 lb) without bracket
Dimensions (Dia x Depth)	22.2 x 12.4 x 4.5 cm (8.75 x 4.9 x 1.75 in) without brackets
Power Consumption	25W Maximum**
Input Voltage	44V to 59V
Sector Antenna Connection	4 x 50 ohm SMA GPS puck included in package
Beamforming Antenna Connection	2 x 50 ohm, RP (reverse polarity) SMA, DC coupled (powering antenna)
GPS Antenna Connection	1 x 50 ohm

*30 V Gigabit surge suppressor recommended for optimal surge protection: Part # C000000L065A.
**The maximum power consumption of the AP is the same regardless of whether the optional Smart Beamforming Antenna is equipped or not. This is because the beamforming antenna draws its power during the uplink cycle when the AP power consumption is not at its maximum.

Security	
Encryption	All models: 128-bit AES (CCMP mode)

Certifications	
FCCID	Z8H-89FT0024
Industry Canada Cert	109W-0024
CE	See Cambium website for Declaration of Conformity

Ordering Information	
C050911A101A	ePMP 3000 5 GHz Access Point Radio FSR 5.1-5.97 GHz (ROW) (US cord)
C050911A201A	ePMP 3000 5 GHz Access Point Radio FSR 5.1-5.97 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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