

ePMP 6 GHz Force 4600C Subscriber Module

ePMP 4600C SM QUICK LOOK:

- High-performance subscriber module for PTP and PMP fixed wireless broadband applications
- Multi-Gbps capacity leveraging 160 MHz channels
- Interoperates in PMP applications with ePMP 4600 APs



Service providers face ever-increasing demand for capacity in a limited amount of spectrum. Cambium Networks ePMP™ Force 4600C Subscriber Modules (SM) meet this demand offering high performance and low latency across both point-to-multipoint (PMP) and point-to-point (PTP) deployments.

The Force 4600C SM is available in connectorized form factor with 2 x RP-SMA connectors.

Features:

- High capacity and latencies less than 5 ms when using ePTP technology.
- Interoperability with ePMP 4600 Series Access Points (AP).
- Provides multi-Gbps capacity in PTP applications, meeting the requirements of enterprise, industrial, government, and service provider users.
- Managed by Cambium Networks cnMaestro™ Network Management System for easy provisioning, monitoring, and upgrades.
- Network planning with LINKPlanner and cnHeat.
- Includes a Power over Ethernet (PoE) injector and pole mount hardware.

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Spectrum

Channel Width MHz	20 40 80 160 MHz
Proprietary Physical Layer	ePMP air interface with 2x2 MIMO/OFDMA
Channel Spacing	Configurable in 5 MHz increments
Frequency Range	5725–7125 MHz ^{1,2} ¹ Allowable frequencies and bands are dictated by individual country regulations. Operation under AFC (Automatic Frequency Coordination) control in FCC jurisdictions. ² Performance of radio from 5725–5925 MHz is TBD.
MAC Layer (Media Access Control)	Cambium proprietary
Ethernet Interface	100/1000 BaseT, rate auto negotiated, 802.3at compliant; SFP+ port
Protocols Used	IPv4/IPv6, UDP, TCP, IP, ICMP, SNMPv2c, HTTPs, STP, SSH, IGMP snooping
Network Management	HTTP/HTTPS, SNMPv1/2, SNMPv3, SSH
VLAN	802.1Q with 802.1p priority

Performance

ARQ	Yes
Nominal Receive Sensitivity (w/FEC) @20 MHz Channel	MCS 0 = -92 dBm to MCS 13 (4096 QAM-5/6) = -53 dBm (per chain)
Nominal Receive Sensitivity (w/FEC) @40 MHz Channel	MCS 0 = -89 dBm to MCS 13 (4096 QAM-5/6) = -50 dBm (per chain)
Nominal Receive Sensitivity (w/FEC) @80 MHz Channel	MCS 0 = -86 dBm to MCS 13 (4096 QAM-5/6) = -47 dBm (per chain)
Nominal Receive Sensitivity (w/FEC) @160 MHz Channel	MCS 0 = -83 dBm to MCS 13 (4096 QAM-5/6) = -44 dBm (per chain)
Modulation Levels (Adaptive)	MCS 0 (BPSK) to MCS 13 (4096 QAM-5/6)
Geolocation	Integrated GPS with antenna puck
Transmit Power Range	+3 to +28 dBm (combined, to regional EIRP limit) (1 dB interval)
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

Physical

Surge Suppression	1 Joule Integrated
Environmental	IP67
Temperature	-40°C to 55°C (-40°F to 131°F)
Weight	0.73 kg (1.61 lb) without bracket
Dimensions (Dia x Depth)	256 x 125 x 47 mm (10.1 x 4.9 x 1.9 in)
Pole Diameter Range	Center: 3.1 to 7.6 cm (1.25 to 3.0 in)
Power Consumption	28W
Input Voltage	44V–59V
Antenna	External Dish, 2 x 50 ohm, RP SMA (reverse polarity) 6 GHz Dish: Part # C060900D021A
GPS Antenna Connection	1 x 50 ohm, SMA; external GPS GPS Puck Antenna: Part # N000900L030A

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Security

Encryption	128-bit AES (CCMP mode), 256-bit AES optional, where allowed
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Certifications

FCCID	Z8H89FT0069
FCC Regulatory Part #	C068940P151A
ETSI Regulatory Part #	C060940P051A
Industry Canada Cert	109W-0069
CE	Visit cambiumnetworks.com for declaration of conformity.



Front



Side



Back

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Ordering Information

C060940C021A	ePMP 6 GHz Force 4600C SM Radio (ROW) (no cord)
C060940C121A	ePMP 6 GHz Force 4600C SM Radio (ROW) (US cord)
C060940C221A	ePMP 6 GHz Force 4600C SM Radio (ROW) (EU cord)
C060940C223A	ePMP 6 GHz Force 4600C SM Radio (EU) (EU cord)
C060940C321A	ePMP 6 GHz Force 4600C SM Radio (ROW) (UK cord)
C060940C323A	ePMP 6 GHz Force 4600C SM Radio (EU) (UK cord)
C060940C421A	ePMP 6 GHz Force 4600C SM Radio (ROW) (India cord)
C060940C425A	ePMP 6 GHz Force 4600C SM Radio (India) (India Cord)
C060940C521A	ePMP 6 GHz Force 4600C SM Radio (ROW) (China cord)
C060940C621A	ePMP 6 GHz Force 4600C SM Radio (ROW) (Brazil cord)
C060940C721A	ePMP 6 GHz Force 4600C SM Radio (ROW) (Argentina cord)
C060940C821A	ePMP 6 GHz Force 4600C SM Radio (ROW) (ANZ cord)
C060940C921A	ePMP 6 GHz Force 4600C SM Radio (ROW) (South Africa cord)
C060940CZ21A	ePMP 6 GHz Force 4600C SM Radio (ROW) (No PSU)
C068940C122B	ePMP 6 GHz Force 4600C SM Radio (FCC/IC) (US Cord)
C060940C226A	ePMP 6 GHz Force 4600C SM Radio (Indonesia (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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