

ePMP™ Force 190



Wireless service providers and enterprises around the globe are challenged to deliver reliable connectivity in overcrowded RF environment. As spectrum increasingly becomes a scarce commodity, finding the right broadband connectivity solution is vital for all low and high density types of deployments.

FEATURES:

- Cambium Networks' ePMP Force 190 will lower the logistical cost of ownership by reducing shipping costs with its highly compact packaging.
- The ePMP Force 190 is designed to operate in high interference environments and provides throughput of up to 200Mbps with bi-directional traffic of real user data.
- Configurable Modes of operation ensure robust adaptivity to both symmetrical and asymmetrical traffic while providing high performance and round-trip latency as low as 2 - 3 ms.
- QoS management offers an outstanding quality for triple play services - VoIP, video and data and provides three levels of trafficpriority.
- Long deployment range is enabled by a high gain antenna combined with 27dBm of transmit power.
- This platform is for the user base that wants a smaller on premises footprint while enabling high gain.
- Install is a breeze with the easy to install mount, capable of pole and wall mounting.

SPECIFICATIONS

SPECTRUM

Channel Spacing	Configurable on 5 MHz increments
Frequency Range	4910 - 5970 MHz, 4.9 only for ROW
Channel Width	5 10 20 40 MHz

INTERFACE

MAC (Media Access Control) Layer	Cambium Proprietary
Physical Layer	2x2 MIMO/OFDM
Ethernet Interface	10/100 BaseT, Compatible with Cambium PoE & Standard PoE pinouts
Protocols Used	IPv4/IPv6 (Dual Stack), UDP, TCP, ICMP, SNMPv2c, NTP, STP, IGMP, SSH
Network Management	IPv4/IPv6, HTTPs, SNMPv2c, SSH, Cambium Networks CnMaestro™
VLAN	802.1Q with 802.1p priority

SPECIFICATIONS

PERFORMANCE

ARQ	Yes
Nominal Receive Sensitivity (w/FEC) @20 MHz Channel	MCS0 = -92 dBm to MCS15 = -68 dBm (per branch)
Nominal Receive Sensitivity (w/FEC) @40 MHz Channel	MCS0 = -89 dBm to MCS15 = -65 dBm (per branch)
Modulation Levels (Adaptive)	MCS0 (BPSK) to MCS15 (64QAM 5/6)
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
Transmit Power Range	-15 to +27 dBm (combined, to regional EIRP limit) (1 dB interval)
Antenna Gain	22dBi

PHYSICAL

Surge Suppression	1 Joule Integrated
Environmental	IP55
Temperature	-30°C to +50°C (-22°F to +122°F)
Weight	1.0 kg (2.2 lbs)
Wind Survival	125 km/hour (78 mi/hour)
Dimensions (Dia x Depth)	35cmx28cm(13.5inx11.2in)
Pole Diameter Range	3.8 cm – 6.4 cm (1.5 in – 2.5 in)
Power Consumption	8 W Maximum, 5 W Typical
Input Voltage	12 to 30 V

SECURITY

Encryption	128-bitAES(CCMPmode)
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CERTIFICATIONS

FCCID	Z8H80FT0031
Industry Canada Cert	109W-0031
CE	5.4 GHz EN 301 893 V2.1.1 5.8 GHz EN 302 502 V2.1.1

PART NUMBER

DESCRIPTION

C058900C082A	ePMPForce 1905GHz SubscriberModule(FCC)(USCord)
C050900C083A	ePMPForce 190 5GHz Subscriber Module (EU)(EU Cord)
C050900C873A	ePMP Force 190 5 GHz Subscriber Module (EU) (UK Cord)
C050900C081A	ePMP Force 190 5 GHz Subscriber Module (RoW) (No Cord)
C050900C181A	ePMP Force 190 5 GHz Subscriber Module (RoW) (US Cord)
C050900C281A	ePMP Force 190 5 GHz Subscriber Module (RoW) (EU Cord)
C050900C481A	ePMPForce 190 5GHz Subscriber Module(RoW)(India Cord)
C050900C581A	ePMPForce 1905GHz SubscriberModule(RoW)(China Cord)
C050900C681A	ePMPForce 1905GHz SubscriberModule(RoW)(Brazil Cord)
C050900C781A	ePMPForce 1905GHz SubscriberModule(RoW)(Argentina Cord)
C050900C881A	ePMP Force 190 5 GHz Subscriber Module (RoW) (ANZ Cord)
C050900C981A	ePMP Force 190 5 GHz Subscriber Module (RoW) (No PSU)

SPECIFICATIONS

ANTENNA SPECIFICATIONS

5 GHz SPECIFICATION

Frequency Range	4.910 – 5.970 MHz
Antenna Type	Dish
Peak Gain	22 dBi
3dB Beamwidth-Azimuth	10-11 degrees
3dB Beamwidth-Elevation	10-11 degrees

ANTENNA PATTERNS

