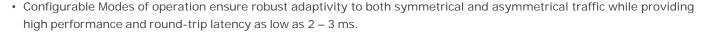


ePMP[™] Force 190

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.



- QoS management offers an outstanding quality for triple play services VoIP, video and data and provides three levels of traffic priority.
- · 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.



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, UDP, TCP, IP, ICMP, SNMPv2c, HTTPs, STP, SSH, IGMP Snooping
NetworkManagement	HTTPs, SNMPv2c, SSH
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	MCSO = -89 dBm to MCS15 = -65 dBm (per branch)
ModulationLevels (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)
WindSurvival	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-bit AES (CCMPmode)
CERTIFICATIONS	
FCCID	Z8H80FT0031
Industry Canada Cert	109W-0031
CE	5 GHz: EN 302 502 v1.2.1 5 GHz: EN 301 893 v1.7.1
PART NUMBER	DESCRIPTION
C058900C082A	ePMPForce1905GHzSubscriberModule(FCC)(USCord)
C050900C083A	ePMPForce1905GHzSubscriberModule(EU) (EU Cord)
C050900C873A	ePMPForce 1905 GHz Subscriber Module (EU) (UK Cord)
C050900C081A	ePMP Force 190 5 GHz Subscriber Module (RoW) (No Cord)
C050900C181A	ePMP Force 1905 GHz Subscriber Module (RoW) (US Cord)
C050900C281A	ePMP Force 190 5 GHz Subscriber Module (RoW) (EU Cord)
C050900C481A	ePMP Force 1905 GHz Subscriber Module (RoW) (India Cord)
C050900C581A	ePMP Force 1905 GHz Subscriber Module (RoW) (China Cord)
C050900C681A	ePMP Force 1905 GHz Subscriber Module (RoW) (Brazil Cord)
C050900C781A	ePMP Force 1905 GHz Subscriber Module (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

