Cambium Networks™

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 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

SPECIFICATIONS

SPECTRUM

Channel Spacing	Configurable on 5 MHz increments
Frequency Range	4910 - 5970 MHz
Channel Width	5 | 10 | 20 | 40 MHz

INTERFACE

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

SPECIFICATIONS

PERFORMANCE

ARQ	Yes
Nominal Receive Sensitivity (w/FEC) @200MHzChannel	MCS0 = -92 dBm to MCS15 = -68 dBm (per branch)
Nominal Receive Sensitivity (w/FEC) @40MHzChannel	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 +26 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)	35 cm x 28 cm (13.5 in x 11.2 in)
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 (CCMP mode)

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	ePMP Force 190 5 GHz Subscriber Module (FCC) (US Cord)
C050900C083A	ePMP Force 190 5 GHz 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	ePMP Force 190 5 GHz Subscriber Module (RoW) (India Cord)
C050900C581A	ePMP Force 190 5 GHz Subscriber Module (RoW) (China Cord)
C050900C681A	ePMP Force 190 5 GHz Subscriber Module (RoW) (Brazil Cord)
C050900C781A	ePMP Force 190 5 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)