

ePMP™ Force 300-25 for 5 GHz

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

Cambium Networks resolves this challenge with a breakthrough technology solution that delivers superior performance, resiliency and reach in the most congested environments. Combining the latest 802.11AC Wave 2 chipset and the field-proven proprietary software solution from ePMP, the Force 300-25 offers a compelling yet affordable Point-to-Point product and a future high gain subscriber module for the ePMP 3000 Access Point.

Force 300-25 continues the tradition of previous products with a highly-integrated 25dBi dish, narrow beamwidth and reliable mechanics. Supporting peak throughput greater than 500 Mbps, the Force 300-25 also supports an always-on spectrum analyzer and local WiFi management to take advantage of mobile installation applications.



COST-EFFECTIVE HIGH SPEED CONNECTIVITY

Cambium Networks' ePMP Force 300-25 is designed to operate in high interference environments and provides superior throughput of over 500 Mbps of real user data.

NEW CHANNEL SIZE AND MODULATION SUPPORT

ePMP Force 300-25 supports channel size configuration from 20 MHz up to 80 MHz and modulates up to 256 QAM.

WIRELESS DEVICE MANAGEMENT

The Force 300-25 supports a local Wi-Fi connection to allow easy installation, configuration, and monitoring from any Wi-Fi enabled device.

BUILT-IN LIVE SPECTRUM ANALYZER

The ePMP Force 300-25 supports constant monitoring of the radio spectrum and allows for live action without bringing down the radio.

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FI FXIBILITY OF OPERATING MODES

Configurable modes of operation ensure robust adaptivity to both symmetrical and asymmetrical traffic while providing high performance and round-trip latency as low as 3-5 ms.

QUALITY OF SERVICE

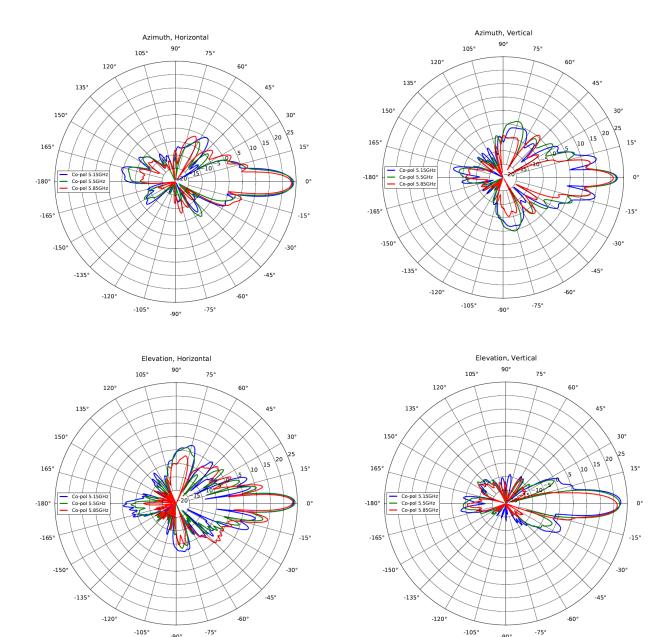
QoS management offers an outstanding quality for triple play services – VoIP, video and data – and provides three levels of traffic priority.

PRODUCT	
Part Numbers	C058910C102A (FCC) C050910C001A (ROW) C050910C201A (ROW) C050910C301A (ROW) C050910C401A (ROW) C050910C501A (ROW) C050910C601A (ROW) C050910C701A (ROW) C050910C801A (ROW) C050910C801A (ROW)
SPECTRUM	
Channel Spacing	Configurable on 5 MHz increments
Frequency Range	Wide-band operation 5.150 to 5.970 GHz (Allowable frequencies and bands are dictated by individual country regulations)
Channel Width	2 channels, each channel with 20, 40, and 80 MHz
INTERFACE	
MAC (Media Access Control) Layer	Cambium Proprietary
Physical Layer	2 x 2 MIMO / OFDM
Ethernet Interface	10/100/1000 BaseT, Compatible with Cambium PoE and Standard PoE Pinouts
Protocols Used	IPv6/IPv4 Management, UDP, TCP, IP, ICMP, SNMPv2c, HTTPs, STP, SSH, IGMP Snooping
Network Management	HTTPs, SNMPv2c, SSH
VLAN	802.1Q with 802.1p priority
PERFORMANCE	
ARQ	Yes
Nominal Receive Sensitivity (w/FEC) @ 20 MHz Channel	MCS0 = -87 dBm to MCS8 (256QAM-3/4) = -63 dBm (per chain)
Nominal Receive Sensitivity (w/FEC) @ 40 MHz Channel	MCS0= -85 dBm to MCS9 (256QAM-5/6) = -59 dBm (per chain)
Nominal Receive Sensitivity (w/FEC) @ 80 MHz Channel	MCS0 = -82 dBm to MCS9 (256QAM-5/6) = -56 dBm (per chain)
Modulation Levels (Adaptive)	MCS0 (BPSK) to MCS9 (256QAM-5/6)
Quality of Service	Three level priority (Voice, High, Low) with packet classification by DSCP, CoS, VLAN ID, IP and MAC Address, Broadcast, Multicast and Station Priority

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Transmit Power Range	0 to +27 dB
Physical	
Surge Suppression	1 Joule Integrated
Environmental	IP55
Temperature	-22° to +140° F (-30° to +60° C)
Weight	2.4 Kg (5.3 lbs)
Wind Survival	180 kmph (112 mph)
Dimensions (Dia x Depth)	47 x 31 cm (18.5 x 12.2 in)
Pole Diameter Range	6.4 cm - 7.6 cm (2.5 in - 3 in)
Power Consumption	12 Watts
Input Voltage	30 Volts
SECURITY	
Encryption	128-bit AES (CCMP mode)
CERTIFICATIONS	
FCC ID	TBD
Industry Canada Cert	TBD
CE	TBD
Antenna	
Frequency Range	5150 – 5970 MHz
Antenna Type	Dish
Peak Gain	25 dBi
3 dB Beamwidth-Azimuth	6-10 degrees
3 dB Beamwidth-Elevation	6-10 degrees
Front-to-Back Isolation	25 dB
Cross Polarization	20 dB

-90°



-90°