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.

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 TDD MAC of ePMP, the Force 300-25 offers a compelling yet affordable point to point product and a high gain subscriber module for the ePMP3000 and ePMP 3000L Access Points.

Force 300-25 continues the tradition of previous products with an integrated 25dBi dish with a narrow beamwidth and reliable mechanics. Supporting peak throughput up to 600 Mbps, the Force300-25 also supports an always on spectrum analyzer.

FEATURES:
- 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.
- The ePMP Force 300-25 supports channel size configuration from 20MHz up to 80MHz and modulates up to 256 QAM.
- The ePMP Force 300-25 supports constant monitoring of the radio spectrum with a built-in always-on spectrum analyzer.
- 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.
- 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.
- Installation is a breeze with the included wall and pole mounting bracket.

SPECIFICATIONS

<table>
<thead>
<tr>
<th>SPECIFICATION</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Channel Spacing</td>
<td>Configurable in 5 MHz increments</td>
</tr>
<tr>
<td>Frequency Range</td>
<td>Wide Band Operation 4910 - 5970 MHz (Note: Allowable frequencies and bands are dictated by individual country regulations.)</td>
</tr>
<tr>
<td>Channel Width</td>
<td>20</td>
</tr>
</tbody>
</table>
## SPECIFICATIONS

### INTERFACE

**MAC (Media Access Control) Layer**
Cambium

**Proprietary Physical Layer**
2x2 MIMO/OFDM

**Ethernet Interface**
10/100/1000 BaseT, Compatible with Cambium PoE & Standard PoE pinouts

**Protocols Used**
IPv4/IPv6 (Dual Stack), UDP, TCP, ICMPv2c, NTP, STP, IGMP, SSH

**Network Management**
IPv4/IPv6, HTTPS, SNMPv2c, SSH, Cambium Networks CnMaestro™

**VLAN**
802.1Q with 802.1p priority

### PERFORMANCE

**ARQ**
Yes

**Nominal Receive Sensitivity (w/FEC) @20 MHz Channel**
MCS0 = -87 dBm to MCS8 (256 QAM-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/56)

**Transmit Power Range**
0 to +27 dBm (combined, to regional EIRP limit) (1 dB interval)

### PHYSICAL

**Surge Suppression**
1 Joule Integrated (C0000000L065A - 30V Gigabit surge suppressor is recommended for optimum protection)

**Environmental**
IP55

**Temperature**
-30°C to +60°C (-22°F to +140°F)

**Weight**
2.4 kg (5.3 lbs)

**Wind Survival**
180 km/hour (112 mi/hour)

**Dimensions (Dia x Depth)**
47 cm x 31 cm (18.5 in 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 Nominal (14V to 30V range)

**Power Method Supported**
30V Cambium PoE Injector (included)

### SECURITY

**Encryption**
128-bit AES (CCMP mode)

### CERTIFICATIONS

**FCCID**
ZBH89FT0017

**Industry Canada Cert**
109W-0017

**CE**
EN 301 893 V2.1.1 (5.4 GHz), EN 302 502 V2.1.1 (5.8 GHz)

### PART NUMBER

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>C050910C0102A</td>
<td>ePMP Force 300-25 5 GHz High Gain Radio (FCC) (US Cord)</td>
</tr>
<tr>
<td>C050910C0104A</td>
<td>ePMP Force 300-25 5 GHz High Gain Radio (IC) (Canada/US Cord)</td>
</tr>
<tr>
<td>C050910C0203A</td>
<td>ePMP Force 300-25 5 GHz High Gain Radio (EU) (EU Cord)</td>
</tr>
<tr>
<td>C050910C0303A</td>
<td>ePMP Force 300-25 5 GHz High Gain Radio (EU) (UK Cord)</td>
</tr>
<tr>
<td>C050910C001A</td>
<td>ePMP Force 300-25 5 GHz High Gain Radio (RoW) (no Cord)</td>
</tr>
<tr>
<td>C050910C0101A</td>
<td>ePMP Force 300-25 5 GHz High Gain Radio (RoW) (US Cord)</td>
</tr>
<tr>
<td>C050910C0201A</td>
<td>ePMP Force 300-25 5 GHz High Gain Radio (RoW) (EU Cord)</td>
</tr>
<tr>
<td>C050910C0301A</td>
<td>ePMP Force 300-25 5 GHz High Gain Radio (RoW) (UK Cord)</td>
</tr>
<tr>
<td>C050910C0401A</td>
<td>ePMP Force 300-25 5 GHz High Gain Radio (RoW) (India Cord)</td>
</tr>
<tr>
<td>C050910C0501A</td>
<td>ePMP Force 300-25 5 GHz High Gain Radio (RoW) (China Cord)</td>
</tr>
<tr>
<td>C050910C601A</td>
<td>ePMP Force 300-25 5 GHz High Gain Radio (RoW) (Brazil Cord)</td>
</tr>
</tbody>
</table>
# Specifications

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>C050910C701A</td>
<td>ePMP Force 300-25 5 GHz High Gain Radio (RoW) (Argentina Cord)</td>
</tr>
<tr>
<td>C050910C801A</td>
<td>ePMP Force 300-25 5 GHz High Gain Radio (RoW) (ANZ Cord)</td>
</tr>
<tr>
<td>C050910C901A</td>
<td>ePMP Force 300-25 5 GHz High Gain Radio (RoW) (South Africa Cord)</td>
</tr>
<tr>
<td>C050910CZ01A</td>
<td>ePMP Force 300-25 5 GHz High Gain Radio (RoW) (No PSU)</td>
</tr>
</tbody>
</table>

## Antenna Specifications 5 GHz Specification

<table>
<thead>
<tr>
<th>Frequency Range</th>
<th>4910 - 5970 MHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antenna Type</td>
<td>Dish</td>
</tr>
<tr>
<td>Peak Gain</td>
<td>25 dBi</td>
</tr>
<tr>
<td>3dB Beamwidth-Azimuth</td>
<td>6-10 degrees</td>
</tr>
<tr>
<td>3dB Beamwidth-Elevation</td>
<td>6-10 degrees</td>
</tr>
<tr>
<td>Front-To-Back Isolation</td>
<td>25 dB</td>
</tr>
<tr>
<td>Cross Polarization</td>
<td>20 dB</td>
</tr>
</tbody>
</table>

## Antenna Patterns

### Azimuth, Horizontal

### Azimuth, Vertical

### Elevation, Horizontal

### Elevation, Vertical

© 2019 Cambium Networks Ltd. All rights reserved.