ZoneFlex P300
Smart 802.11ac 5GHz Outdoor Point-to-Point, Point-to-Multipoint Wireless Bridge

DATA SHEET

802.11AC 5GHZ OUTDOOR WIRELESS BRIDGE
The Ruckus ZoneFlex P300 is an outdoor point-to-point and point-to-multipoint bridge that unleashes the promise of 5GHz 802.11ac, delivering unparalleled throughput. Backhaul throughput of over 500Mbps opens opportunities to new business models, bridging remote locations and providing broadband services to locations not reachable before, in an affordable way.

Designed for harsh outdoor conditions, the Ruckus ZoneFlex P300 is perfect for service providers looking to easily extend branded broadband services, backhaul small cell networks, offload data traffic from small cell networks, deploy multimedia hotspots, or offer wireless broadband services where fixed line access is limited.

The ZoneFlex P300 is also ideal for hotels, schools, warehouses and other enterprises looking to extend managed wireless LANs (WLANs) across remote buildings and where Ethernet cabling is not possible.

Auto-pairing of wireless bridges, in addition to flexible mounting options, forgiving antenna pattern, and an easy-to-use aiming software, allows installers to deploy and optimize a wireless link in a short time, significantly increasing productivity and reducing deployment costs.

BENEFITS

WIRE-LIKE THROUGHPUT OVER THE AIR
Based on the 802.11ac standard, the ZoneFlex P300 supports RF capacity up to 867 Mbps. With Ruckus’ purpose-built directional antenna, the ZoneFlex P300 supports throughputs up to 500 Mbps and offers performance up to 100 Mbps at 8 km (LoS).*

* When used with optional external antenna

EASY INSTALLATION AND PAIRING
ZoneFlex P300 enables installers to deploy wireless bridges effortlessly. Lightweight and designed with simple and flexible mounting options.

SIMPLE POSITIONING AND AIMING
Precision aiming and optimized performance with 30-degree beamwidth antenna and sophisticated LED-based aiming software. ZoneFlex P300 proactively finds and selects the best performing channel automatically using Ruckus’ patented ChannelFly channel selection algorithms.

SECURE AND SCALABLE
The wireless bridge link is AES secure and can scale to support multiple networks segmented by VLANs.

10X SCALABILITY WITH WIRELESS MULTI-NODE BRIDGING
Each root bridge capable of supporting up to 10 receiving bridges.

UNMATCHED ROI
The wireless link offers much higher data throughput rates than T1/E1 or xDSL lines at only a fraction of the fixed line installation cost and without the recurring leased line cost. The ZoneFlex P300 is also an ideal option for backhauling small cell cellular networks.

ENVIRONMENTALLY-FRIENDLY DESIGN
The internal dual polarized antenna not only does away the need for installing an external antenna, further simplifying the installation procedure, but also offers an aesthetically pleasing look and feel.
BUILDING TO BUILDING BRIDGING
ZoneFlex P300 provides an ideal solution for linking two LANs in different buildings.

BACKUP LINK FOR DISASTER RECOVERY
ZoneFlex P300 serves as a back up link for enterprise disaster recovery

FEATURES
- 802.11ac Point to Point or Point to Multi Point Bridge
- 5GHz operation
- 20MHz, 40MHz, and/or 80MHz channelization
- 14dBi internal directional antenna
- 2 external N-Type antenna connectors
- 802.3af Power over Ethernet
- Ruggedized for outdoor conditions: -40°C to 65°C operating temperature, IP67 rated
- Maximum link distance 12 km (using internal antenna)
- Dedicated radar avoidance pre scan (DFS)
- PD-MRC for reliable bridge connections
- Simple installation with mounting brackets included
- Automatic pairing and easy aiming between bridges
- Optional accessories available to enhance range & performance
ZoneFlex P300
Smart 802.11ac 5GHz Outdoor Point-to-Point, Point-to-Multipoint Wireless Bridge

VIDEO SURVEILLANCE
ZoneFlex P300 offers reliable wireless streaming of surveillance video back to a central post.

POINT TO MULTI POINT
ZoneFlex P300 enables point to multi point backhaul bridging for up to 10 receiving bridges.
ZoneFlex P300
Smart 802.11ac 5GHz Outdoor Point-to-Point, Point-to-Multipoint Wireless Bridge

**PHYSICAL CHARACTERISTICS**

**Power**
- 802.3af Power over Ethernet

**Physical Size**
- 18 cm (L), 15 cm (W), 8.6 cm (H)
- 7” (L), 5.9” (W), 3.4” (H)

**Weight**
- 5.5 lbs (2.5kg) with adj bracket
- 2.1 lbs (1kg) without adj bracket

**Ethernet Ports**
- 1 port, auto MDX, auto-sensing 10/100/1000 Mbps, RJ-45
- Power over Ethernet (802.3af)

**Antenna**
- 14 dBi internal directional antenna
- 30 degree 3dB beamwidth
- Two external N-Type antenna connectors

**Lock Options**
- Pad-Eye for locking devices

**Environmental Conditions**
- IP-67 rated
- Operating air temperature: -40°C to 65°C (-40°F to 149°F)

**Power Draw**
- Quiescent 6.5W
- Typical 7.5W
- Peak 11W

**PERFORMANCE AND CAPACITY**

**TARGET UDP THROUGHPUT**
- Up to 500Mbps
- Up to 250Mbps at 2.6 km/1.6 mi
- Up to 100Mbps at 8 km/5 mi

**MAXIMUM LINK DISTANCE**
- 12 kilometers

**POINT-TO-MULTIPOINT**
- 30 degrees of coverage from the one root bridge with internal antenna to many receiving bridges
- 120 degrees of coverage when used with optional external antenna

**RF**

**MAXIMUM EIRP**
- Up to 36dBm

**PHYSICAL ANTENNA GAIN**
- Up to 14dBi

**MINIMUM RX SENSITIVITY**
- Up to -96dBm

**MANAGEMENT**

**Configuration**
- Web User Interface (HTTP/S)
- CLI (Telnet/SSH), SNMP v1, 2, 3

**Wi-Fi**

**Standard**
- IEEE 802.11ac
- 5GHz operation

**Modulation**
- OFDM

**Radio chains**
- 2 x 2

**Spatial streams**
- 2

**RF power output**
- 22 dBm

**Channelization**
- 20MHz, 40MHz, and/or 80MHz

**Frequency band**
- IEEE 802.11ac: 5.15 – 5.875GHz

**Wireless security**
- WPA2 AES

**Certifications**
- U.S., Europe, Argentina, Australia, Brazil, Canada, Chile, China, Colombia, Costa Rica, Hong Kong, India, Indonesia, Israel, Japan, Korea, Malaysia, Mexico, Peru, Philippines, Russia, Saudi Arabia, Singapore, South Africa, and Taiwan
- WEEE/RoHS compliance

* Maximum power varies by country
** For current certification status please see price list

**PRODUCT ORDERING INFORMATION**

**MODEL**

**DESCRIPTION**

<table>
<thead>
<tr>
<th>MODEL</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>901-P300-XX02</td>
<td>P300, Pre-Provisioned Pair, outdoor 802.11ac 2X2:2 bridge, 5GHz internal antenna, optional antenna support, one ethernet port, PoE input, includes mounting brackets and one year warranty. Does not include PoE injector, power adapters, optional external antennae or optional external RF cables</td>
</tr>
<tr>
<td>901-P300-XX01</td>
<td>P300, single unit, outdoor 802.11ac 2X2:2 bridge, 5GHz internal antenna, optional antenna support, one ethernet port, PoE input, includes mounting brackets and one year warranty. Does not include PoE injector, power adapters, optional external antennae or optional external RF cables</td>
</tr>
</tbody>
</table>

**Optional Accessories**

<table>
<thead>
<tr>
<th>MODEL</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>911-2101-DP01</td>
<td>5 GHz high gain directional antenna, dual-polarized 21 dBi gain and 10 degrees 3dBm beamwidth</td>
</tr>
<tr>
<td>911-2401-DP01</td>
<td>High gain directional antenna, dual-polarized 24.5 dBV gain/23.5dBi H gain and 7-9 degrees 3dBm beamwidth</td>
</tr>
<tr>
<td>911-1212-DP01</td>
<td>5 GHz directional antenna, dual-polarized 12.5dBi gain and 120 degrees 3dBm beamwidth</td>
</tr>
<tr>
<td>902-0162-XXY</td>
<td>Spare, PoE Adapter, 10/100/1000BaseT, with country specific power adapter</td>
</tr>
<tr>
<td>902-0182-0003</td>
<td>Spare, Outdoor Mounting Bracket, Bare Metal, Any-Angle</td>
</tr>
</tbody>
</table>

† Including one dual plane adjustable wall/pole mounting kit and two 1m RF cables with N-Type connectors.

PLEASE NOTE: When ordering, you must specify the destination region by indicating -US, -WW

For access points, -Z2 applies to the following countries: Algeria, Egypt, Israel, Morocco, Tunisia, and Vietnam

---

Copyright © 2016, Ruckus Wireless, Inc. All rights reserved. Ruckus Wireless and Ruckus Wireless design are registered in the U.S. Patent and Trademark Office. Ruckus Wireless, the Ruckus Wireless logo, BeamFlex, ZoneFlex, MediaFlex, FlexMaster, ZoneDirector, SpeedFlex, SmartCast, SmartCell, ChannelFly and Dynamic PSK are trademarks of Ruckus Wireless, Inc. in the United States and other countries. All other trademarks mentioned in this document or website are the property of their respective owners.

16-10-A

Ruckus Wireless, Inc. | 350 West Java Drive | Sunnyvale, CA 94089 USA | T: (650) 265-4200 | F: (408) 738-2065
ruckuswireless.com