

Ruckus P300

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



DATA SHEET



BENEFITS

WIRE-LIKE THROUGHPUT OVER THE AIR

Based on the 802.11ac standard, the P300 supports RF capacity up to 867 Mbps. With Ruckus' purpose-built directional antenna, the 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

Ruckus 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. 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 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.

802.11AC 5GHZ OUTDOOR WIRELESS BRIDGE

The Ruckus 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.

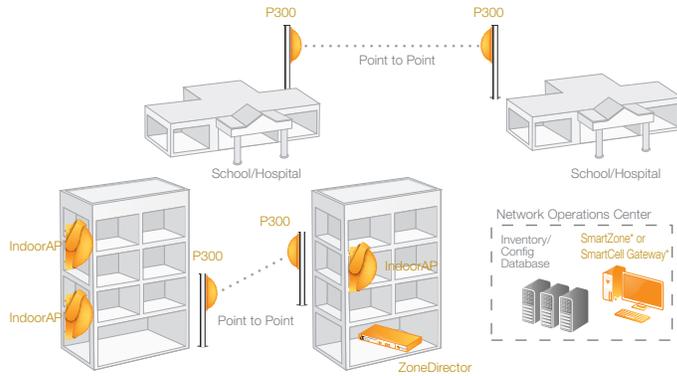
Designed for harsh outdoor conditions, the Ruckus P300 is perfect for service providers looking to easily extend branded broadband services, backhaul small cell networks, offload data traffic from small cell networks, deploy multimedia hotspots, or offer wireless broadband services where fixed line access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

The 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.

BUILDING TO BUILDING BRIDGING

Ruckus P300 provides an ideal solution for linking two LANs in different buildings.

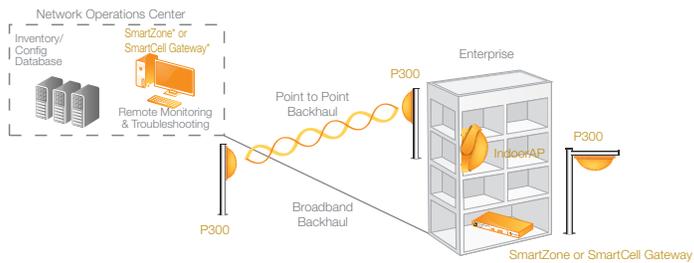


FEATURES

- 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

BACKUP LINK FOR DISASTER RECOVERY

Ruckus P300 serves as a back up link for enterprise disaster recovery



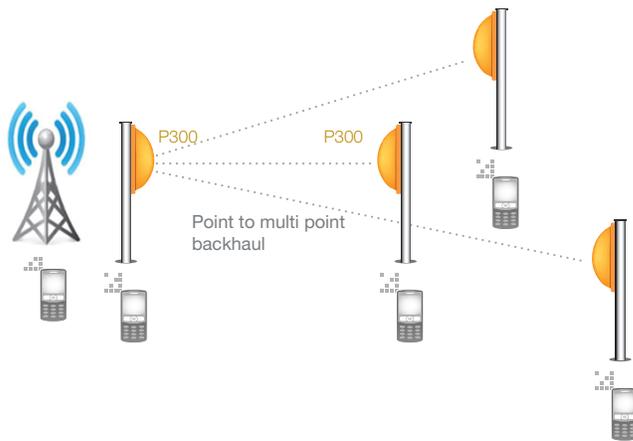
VIDEO SURVEILLANCE

P300 offers reliable wireless streaming of surveillance video back to a central post



POINT TO MULTI POINT

P300 enables point to multi point backhaul bridging for up to 10 receiving bridges



PHYSICAL CHARACTERISTICS	
Power	<ul style="list-style-type: none"> 802.3af Power over Ethernet
Physical Size	<ul style="list-style-type: none"> 18 cm (L), 15 cm (W), 8.6 cm (H) 7" (L), 5.9" (W), 3.4" (H)
Weight	<ul style="list-style-type: none"> 5.5 lbs (2.5kg) with adj bracket 2.1 lbs (1kg) without adj bracket
Ethernet Ports	<ul style="list-style-type: none"> 1 port, auto MDX, auto-sensing 10/100/1000 Mbps, RJ-45 Power over Ethernet (802.3af)
Antenna	<ul style="list-style-type: none"> 14 dBi internal directional antenna 30 degree 3dB beamwidth Two external N-Type antenna connectors
Lock Options	<ul style="list-style-type: none"> Pad-Eye for locking devices
Environmental Conditions	<ul style="list-style-type: none"> IP-67 rated Operating air temperature: -40°C to 65°C (-40°F to 149°F)
Power Draw	<ul style="list-style-type: none"> Quiescent 6.5W Typical 7.5W Peak 11W

PERFORMANCE AND CAPACITY	
TARGET UDP THROUGHPUT*	<ul style="list-style-type: none"> Up to 500Mbps Up to 250Mbps at 2.6 km/1.6 mi Up to 100Mbps at 8 km/5 mi**
MAXIMUM LINK DISTANCE***	<ul style="list-style-type: none"> 12 kilometers
POINT-TO-MULTIPOINT	<ul style="list-style-type: none"> 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

*Throughputs and range may vary depending upon regulatory restrictions, operating band, channel width and interference environment

**When used with 24 dBi external antennas

***When used with internal directional antenna

RF	
MAXIMUM EIRP*	<ul style="list-style-type: none"> Up to 36dBm
PHYSICAL ANTENNA GAIN	<ul style="list-style-type: none"> Up to 14dBi
MINIMUM RX SENSITIVITY	<ul style="list-style-type: none"> Up to -96dBm

MANAGEMENT	
Configuration	<ul style="list-style-type: none"> Web User Interface (HTTP/S) CLI (Telnet/SSH), SNMP v1, 2, 3

WI-FI	
Standard	<ul style="list-style-type: none"> IEEE 802.11ac 5GHz operation
Modulation	<ul style="list-style-type: none"> OFDM
Radio chains	<ul style="list-style-type: none"> 2 x 2
Spatial streams	<ul style="list-style-type: none"> 2
Rf power output	<ul style="list-style-type: none"> 22 dBm
Channelization	<ul style="list-style-type: none"> 20MHz, 40MHz, and/or 80MHz
Frequency band	<ul style="list-style-type: none"> IEEE 802.11ac: 5.15 - 5.875GHz
Wireless security	<ul style="list-style-type: none"> WPA2 AES
Certifications**	<ul style="list-style-type: none"> 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
P300 802.11ac 5GHz Outdoor Wireless Bridge	
901-P300-XX02	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 antennas or optional external RF cables
901-P300-XX01	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 antennas or optional external RF cables
Optional Accessories	
911-2101-DP01	5 GHz high gain directional antenna, dual-polarized 21 dBi gain and 10 degrees 3dBm beamwidth‡
911-2401-DP01	High gain directional antenna, dual-polarized 24.5 dBi V gain/23.5dBi H gain and 7-9 degrees 3dBm beamwidth‡
911-1212-DP01	5 GHz directional antenna, dual-polarized 12.5dBi gain and 120 degrees 3dBm beamwidth‡
902-0162-XXYY	Spare, PoE Adapter, 10/100/1000BaseT, with country specific power adapter
902-0182-0003	Spare, Outdoor Mounting Bracket, Bare Metal, Any-Angle

‡ 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