

Bluesocket

# 3040/3045

Quad-Radio 802.11ac Wave 2 Access Point



## Benefits

- 802.11a/b/g/n/ac wave 2 wireless access points supporting 4X4:4 MU-MIMO antenna technology
- Quad Radio; concurrent 2.4 and 5 GHz radios, dedicated dual band scanning/security radio and integrated Bluetooth Low Energy (BLE) radio
- Data rates up to 1.733 Gbps on 5 GHz radio and 800 Mbps on 2.4 GHz radio
- Multi-gigabit Ethernet scales up to 2.5 Gbps
- Zero-touch AP deployment - APs automatically discover vWLAN, download firmware, and download configuration
- DynamicRF Radio Resource Management (RRM) Technology with dedicated scanning radio - automatically configures optimal radio settings to maximize performance
- DynamicSteering – Band/client steering, load balancing and sticky client prevention technology allows the Wi-Fi infrastructure to take charge making informed, coordinated, connectivity and roaming decisions
- Layer 7 Device Fingerprinting provides reporting and analytics of device types and device specific policies
- Integrated wireless intrusion detection system (WIDS) with dedicated security radio to identify rogue access points and wireless attacks
- Stateful firewall for highest security at the edge
- Powered via 802.3at (POE+)
- Increased receive sensitivity to compensate for mobile and IOT devices with less transmit power
- Supports WMM/802.11e and QoS for Carrier-class Voice and Video over Wi-Fi

## Overview

ADTRAN's wireless portfolio includes a family of 802.11n, 802.11ac wave 1 and 802.11ac wave 2 high performance Access Points (APs) that are a perfect fit for service provider and enterprise deployments of all sizes, including K-12 and higher education campuses, corporate, public and sports/entertainment venues, hospitality, retail including malls, coffee shops, bars, restaurants and manufacturing, healthcare facilities, airports and train stations who are looking to move their organizations to a pervasive mobility environment. Bluesocket APs are completely plug-and-play requiring no manual configuration and deliver optimal performance. Whether you want to add wireless to your office or deploy across an entire campus, the Bluesocket APs are designed to meet your needs.

### High-Performance, Reliable Connectivity

The Bluesocket 3040 and 3045 indoor APs offer carrier-grade performance with 4 radios including concurrent 5 and 2.4 GHz radios with four transmit and four receive streams providing data rates up to

1.733 Gbps on the 5 GHz radio and 800 Mbps on the 2.4 GHz radio for a total of 2.5 Gbps, a dedicated dual band scanning/security radio for DynamicRF Radio Resource Management (RRM) and Wireless Intrusion Detection (WIDS), and an integrated Bluetooth Low Energy (BLE) radio.

The Bluesocket 3040 AP includes a total of 10 internal modular high efficiency PIFA omnidirectional antennas - four internal antennas with 6 dBi peak gain for the 5 GHz radio, four internal antennas with 4 dBi peak gain for the 2.4 GHz radio, one internal antenna with 3/5 dBi peak gain for the dual band scanning/security radio (2.4/5 GHz respectively) and one internal antenna with 4 dBi peak gain for the BLE radio.

The Bluesocket 3045 AP includes a total of 8 RP-SMA connectors for external antennas and two internal modular high efficiency PIFA omnidirectional antennas - Four RP-SMA connectors for external antennas for the 5 GHz radio, four RP-SMA connectors for external antennas for the 2.4 GHz radio, one internal antenna with 3/5 dBi peak gain for the dual band scanning/security radio (2.4/5 GHz respectively) and one internal antenna with 4 dBi peak gain for the BLE radio.



# BLUESOCKET 3040/3045

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The Multi-gigabit Ethernet uplink port scales up to 2.5 Gbps but is also backwards compatible to 100/1000Base-T. This combined with an additional Gigabit Ethernet uplink port allows enterprises to leverage their existing wired infrastructure today and multi-gigabit in the future.

The Bluesocket 3040 and 3045 APs provide the highest performance and reliable coverage in ultra-high density wireless environments such as indoor arenas, conference centers, libraries, and other high traffic areas. The Bluesocket 3040 Series APs support the newer generation of laptops with four stream radio support, and offer higher receive sensitivity on both the 2.4 and 5 GHz radios to compensate for Bring Your Own Devices (BYOD) such as smartphones and tablets and Internet of Things (IoT) devices that have a fraction of the transmit power of traditional laptops.

The Bluesocket 3040 and 3045 APs are fully functional with the power delivered by a single port 802.3at PoE+ solution.

## Flexible, Cloud-Managed Options

The Bluesocket APs operate in conjunction with ADTRAN's flexible portfolio of cloud-managed deployment options including public cloud (ADTRAN's data center), private cloud (Customer's data center/on-premises) or partner cloud (Partner's data center) with the freedom to migrate between them.

ADTRAN's wireless solution is built upon Bluesocket virtual Wireless LAN (vWLAN), the industry's premier cloud-managed wireless LAN. vWLAN® is simple yet powerful: simple in that it is intuitive, easy to learn, setup and use, and powerful with unmatched visibility, security, reliability, scalability and performance. In addition, ADTRAN's ProServicesSM offer the most robust lifecycle professional services - from initial designs, to onsite surveys, to installations, all the way to end-user Help Desk.

## Deployments Made Simple—Auto Provision, Auto Configure, Auto Optimize

- **Zero-touch AP Deployment:** APs automatically discover vWLAN in the cloud, download firmware and download configuration.

- **Zero-IT Setup:** Enjoy a fully functional employee and guest network in minutes with just a few clicks and key-strokes.
- **DynamicRF:** Radio Resource Management (RRM) technology with dedicated scanning radio maximizes performance, adapts to interference, and provides seamless L2/L3 mobility by automatically setting channel and TX power settings, discovering neighbors and load balancing.
- **DynamicSteering:** Band/client steering, load balancing and sticky client prevention technology opens up a brand new dialogue between the Wi-Fi infrastructure and client devices allowing the Wi-Fi infrastructure to take charge making informed, coordinated, connectivity and roaming decisions from the vantage point of both the Wi-Fi infrastructure and the clients.

## Unmatched Visibility and Insight

Cloud management allows you to view, manage and optimize the Wi-Fi network from any device—anytime.

## Customizable Reporting and Analytics

**Dashboards** provide realtime and historical business insight into the network.

- **Multi-tenant Support** enables centralized management of multiple customers or business entities from a single software instance.

## Unsurpassed Security, Reliability, Scalability and Performance

- **Context-aware Access Control (with Layer 7 Device Fingerprinting)** allows you to define security policies based on user credentials, device type, ownership, location and schedules. Businesses can now support BYOD or allow guest access while ensuring highest levels of network security.
- **Built-in Wireless Intrusion Detection (W-IDS)** with dedicated security radio to detect and isolate rogue access points in the network.
- **Built-in High-Availability (HA)** with zero packet loss failover ensures a reliable, always-on network.
- **Elastic Scalability** allows the network to quickly scale without the constraints of legacy hardware controllers.

## Product Specifications

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### Interfaces

- One multi-gigabit Ethernet auto sensing 100/1000/2500Base-T, one auto sensing 10/100/1000Base-T Ethernet, Serial Console Port (RJ-45 Connector), USB 2.0

### Antennas

#### Bluesocket 3040

- 10 internal modular high efficiency PIFA omnidirectional antennas - four internal antennas with 6 dBi peak gain for the 5 GHz radio, four internal antennas with 4 dBi peak gain for the 2.4 GHz radio, one internal antenna with 3/5 dBi peak gain for the dual band scanning/security radio (2.4/5 GHz respectively) and one internal antenna with 4 dBi peak gain for the BLE radio.

# Quad Radio 802.11ac Wave 2 Access Point

## Bluesocket 3045

- 8 RP-SMA connectors for external antennas and two internal modular high efficiency PIFA omnidirectional antennas - Four RP-SMA connectors for external antennas for the 5 GHz radio, four RP-SMA connectors for external antennas for the 2.4 GHz radio, one internal antenna with 3/5 dBi peak gain for the dual band scanning/security radio (2.4/5 GHz respectively) and one internal antenna with 4 dBi peak gain for the BLE radio.

## Radios

- Concurrent 802.11a/n/ac wave 2 and 802.11b/g/n
- Dedicated dual band scanning/security radio for DynamicRF Radio Resource Management (RRM) and Wireless Intrusion Detection (WIDS)
- Integrated Bluetooth Low Energy (BLE) radio
- DynamicRF (Radio Resource Management) with dedicated scanning radio for Automatic Channel, TX Power and Neighbor Discovery
- DynamicSteering (Band/client steering, load balancing and sticky client prevention technology) with 802.11k/v support
- Configurable Maximum Associated Clients per Radio
- Multicast/Broadcast to Unicast Conversion
- A-MPDU and A-MSDU Frame Aggregation
- HT20, HT40 (High Throughput) and VHT80, VHT80+80, VHT160 (Very High Throughput)
- \*Max Aggregate TX Power
  - 2.4Ghz: 26 dBm/400 mW
  - 5Ghz: 25 dBm/316 mW

## Certifications

- Wi-Fi 802.11a/b/g/n/ac Certification

## Mobility Services

- Eight SSIDs Per Radio
- 802.1Q VLAN Support
- Support for Apple Bonjour-based Services (Airprint, Airplay), Apple CNA, and Microsoft NCSI
- Wireless Client Load Balancing
- Secure Fast Roaming with Opportunistic Key Caching (OKC)
- Seamless Layer 2 and Layer 3 Roaming
- SoftGRE Tunneling
- High Availability

## QoS for Voice, Data, and Video

- Smart Bandwidth Management (Incoming, Outgoing)
- WMM (802.11e)
- 802.1p or Differentiated Service Code Point (DSCP)
- WMM Power Save (U-APSD)

## Security

- 802.1X Port-based Authentication
- Open System (WEP-64/128)
- Shared System (WEP-64/128)

- WPA/WPA2-Personal
- WPA/WPA2-Enterprise
- EAP-TTLS
- EAP-PEAP
- EAP-FAST
- EAP-TLS
- EAP-SIM
- EAP-AKA

## Environment

- **Operating:** 32° F to 113° F (0° C to 45° C)
- **Storage:** -40° F to 158° F (-40° C to 70° C)
- **Humidity (non-condensing):** 5% to 90% Typical

## Physical

### Bluesocket 3040

- **Dimensions:** 8.3 in. x 8.3 in. x 1.5 in. (W x D x H) (210 mm x 210 mm x 35 mm)
- **Weight:** 1.5lbs (0.7 kg)

### Bluesocket 3045

- **Dimensions:** 8.3 in. x 8.3 in. x 1.5 in. (W x D x H) (210 mm x 210 mm x 35 mm)
- **Weight:** 1.5lbs (0.7 kg)

## Power

- 802.3at Compliant Power over Ethernet
- External 12V DC Power Adapter (Optional)

## Mounting

- Wall/Ceiling/T-bar Mount Kit Included
- Plenum Rated (BSAP 3045)
- Anti-Theft: Compatible with Kensington-style Locks

## Agency Approvals

### Electrical/Safety Compliance

- UL 1950
- CSA 22.2
- IEC 60950
- EN 60950

### Radio Approvals

- FCC Part 15.247
- RSS-210 (Canada)
- EN 300.328 (Europe)
- AS/NZS 4771 (Australia & New Zealand)
- NCC (Taiwan) and IDA (Singapore)
- EMI and Susceptibility (Class A)
- FCC Part 15.107 and 15.109
- ICES-003 (Canada)
- EN 301.489-1 and -17 (Europe)
- AS/NZS 3548

## Warranty

- Limited Lifetime Warranty

\*Aggregate of chains. Max TX power may be limited by local regulatory domains (country) and band edge requirements.

# Ordering Information

## Choose Your Access Point

Choose Your AP	Part No.
<b>Indoor AP</b>	
Bluesocket 3040: 802.11a/b/g/n/ac wave 2, 4x4:4, internal MU-MIMO antennas	<b>1700965F1</b>
Bluesocket 3045: 802.11a/b/g/n/ac wave 2, 4x4:4, external RP-SMA connectors	<b>1700966F1</b>

## Choose Your Cloud

Public Cloud - ProCloud	Part No.	Part No.
<b>ProCloud for Indoor AP</b>		
NBD	NBD	7x24x4
One Year	<b>1100MSPH200112</b>	<b>1100MSPH300112</b>
Three Years	<b>1100MSPH200136</b>	<b>1100MSPH300136</b>
Five Years	<b>1100MSPH200160</b>	<b>1100MSPH300160</b>
<b>Public Cloud - ProCloud Plus</b>		
<b>ProCloud Plus for Indoor AP</b>		
NBD	NBD	7x24x4
One Year	<b>1100MSPM200112</b>	<b>1100MSPM300112</b>
Three Years	<b>1100MSPM200136</b>	<b>1100MSPM300136</b>
Five Years	<b>1100MSPM200160</b>	<b>1100MSPM300160</b>
<b>Private Cloud</b>		
FREE vWLAN Virtual Appliance (VMware) (\$1995 value)		<b>Download Only</b> (adtran.com/downloadvwan)
vWLAN 1U Rackmount Appliance (Hardware)		<b>1700900F2</b>
vWLAN Desktop Appliance (Hardware)		<b>1700918F1</b>

## Licenses

Software License	
<b>Licenses purchase waived while covered by ProCloud/ProCloud Plus</b>	
FREE Access Point vWLAN Software License (\$235 value)	<b>1951901G1</b>
Access Point Unified User Access (Wired and Third-Party AP Support) Software License (Optional)	<b>1951910G1</b>

## Accessories

Power Supply and Antennas	
802.3at Compliant PoE Injector for BSAP 3040/3045	<b>1700926F1</b>
AC/DC Power Adapter for BSAP 3040/3045	<b>1700963F1</b>
Omnidirectional Antenna Bundle with 5 dBi gain for BSAP 3045	<b>1700964F1</b>



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