Data Sheet

Bluesocket

2030/2035

Dual Radio 802.11ac Access Point

Benefits

- **802.11a/b/g/n/ac wireless access points supporting MIMO antenna technology**
- **Dual radio 2.4 GHz and 5 GHz**
- **Full 3x3:3 MIMO performance**
- **Data rates up to 1.3 Gbps on 5 GHz radio and 450 Mbps on 2.4 GHz radio**
- **Fully functional with 802.3af (PoE)**
- **User configurable maximum–associated clients per radio**
- **Increased receive sensitivity for mobile devices with less transmit power**
- **"Zero-touch" AP deployment–APs automatically discover vWLAN, and download firmware and configurations**
- **Layer 7 Device Fingerprinting provides reporting and analytics of device types and device-specific policies**
- **Supports WMM/802.11e and QoS for Enterprise-class Voice over Wi-Fi**
- **DynamicRF Radio Resource Management Technology–automatically configuresoptimal 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**
- **Integrated wireless intrusion detection system to identifyrogue access points and wireless attacks**
- **Supports stateful firewall for highest security at the edge**

Overview

ADTRAN's wireless portfolio includes a family of 802.11n and 802.11ac high-performance Access Points (APs) that are a perfect fit for enterprises of all sizes, including educational institutions, retail, hospitality, and healthcare providers 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 2030 and 2035 indoor APs offer enterprise-grade performance, with three transmit and three receive streams providing data rates up to 1.3 Gbps on the 5 GHz radio and 450 Mbps on the 2.4 GHz radio for a total of 1.75 Gbps. The Bluesocket 2030 AP includes six MIMO internal antennas with up to 5.5 dBi gain on the 5 GHz and 4 dBi gain on the 2.4 GHz. The Bluesocket 2035 AP includes six RP-SMA connectors for external antennas.

The Bluesocket 2030 and 2035 APs provide high performance, reliable coverage in ultra-high density wireless environments, such as indoor arenas, conference centers, libraries, and other high traffic areas. The Bluesocket 2030s Series APs support the newer generation of laptops with three stream radio support, and offer higher receive sensitivity on both the 2.4 Ghz and 5 Ghz radios to compensate for Bring Your Own Device (BYOD) type mobile devices such as smartphones and tablets that have a fraction of the transmit power of traditional laptops.

The Bluesocket 2030 and 2035 APs are fully functional with the power delivered by a single port 802.3af 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, private cloud or partner cloud with the freedom to migrate among them.

ADTRAN's wireless solutions are built on 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 ProServices℠ offer the most robust lifecycle professional services—from initial designs, to onsite surveys, to installations, all the way to end-user Help Desk.

BLUESOCKET 2030/2035

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 keystrokes.
- **DynamicRF:** Radio Resource Management (RRM) technology 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 for defining security policies based on users, 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)** 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

Interfaces

- One Auto-sensing, 10/100/1000Base-T, Serial Console Port, RJ-45 Connector

Antenna

- **Bluesocket 2030:** Six Internal MIMO Antennas with 5.5dBi Gain
- **Bluesocket 2035:** Six External RP-SMA Connectors

Radios

- 802.11a/n and 802.11b/g/n
- Configurable for Sensor-mode RF Scanning
- DynamicRF (Radio Resource Management) 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

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- A-MPDU and A-MSDU Frame Aggregation
- HT20, HT40 (High Throughput) and VHT80 (Very High Throughput)
- *Max Aggregate TX Power
  - 2.4Ghz: 24 dBm/250 mW
  - 5Ghz: 26 dBm/400 mW

Certifications

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

Mobility Services

- Eight SSIDs Per Radio
- 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
- High Availability
- Soft GRE tunneling
- 802.1Q VLAN Support

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 104° F (0° C to 40° C)
- **Storage:** 40° F to 158° F (-40° C to 70° C)
- **Humidity:** 5% to 90% Typical

***Aggregate of chains operating at 802.3at PoE or AC/DC power adapter. Max TX power may be limited by operating at 802.3af, local regulatory domains (country) and band edge requirements.**

Physical

Bluesocket 2030 AP

- **Dimensions:** 6.5 in. x 6.5 in. x 1.5 in. (W x D x H) (165 mm x 165 mm x 35 mm)
- **Weight:** 1.25 lbs (0.6 kg)

Bluesocket 2035 AP

- **Dimensions:** 6.5 in. x 6.5 in. x 1.5 in. (W x D x H) (165 mm x 165 mm x 35 mm)
- **Weight:** 1.25 lbs (0.6 kg)

Power

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

Mounting

- Wall/Ceiling/T-bar Mount Kit Included
- Plenum Rated
- **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

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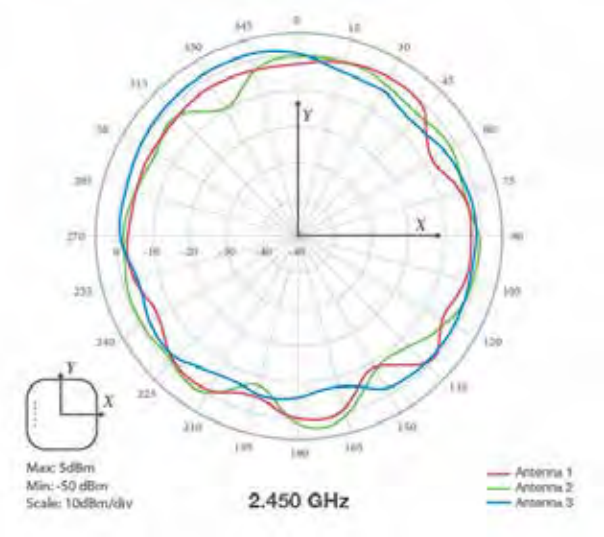
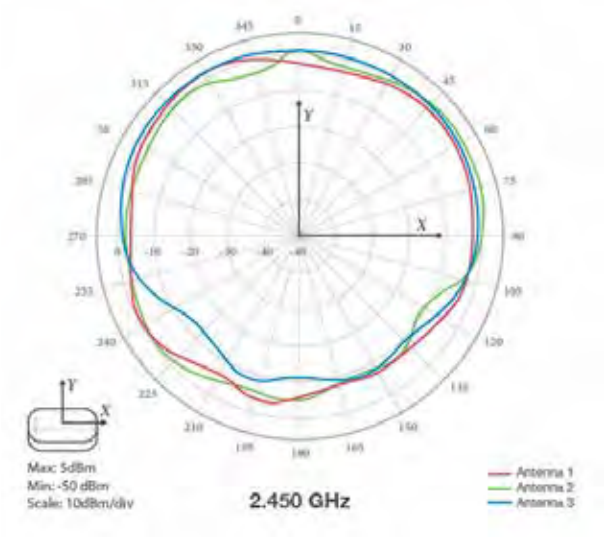
Antenna Patterns

BSAP 2030 – 2.4 GHz (5 dBi)

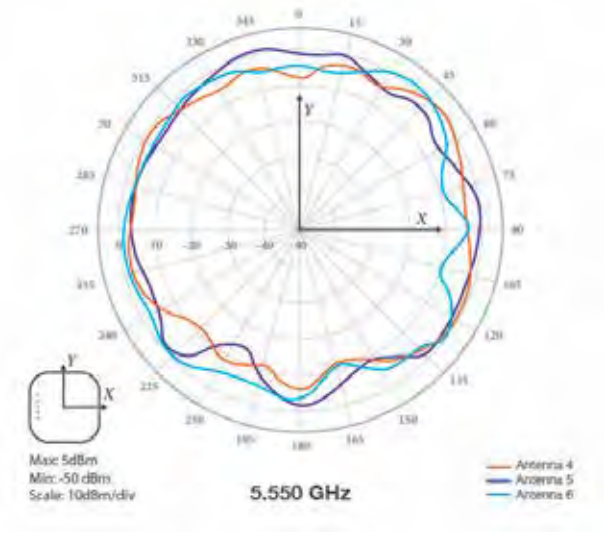


Horizontal or Azimuth (Top View)

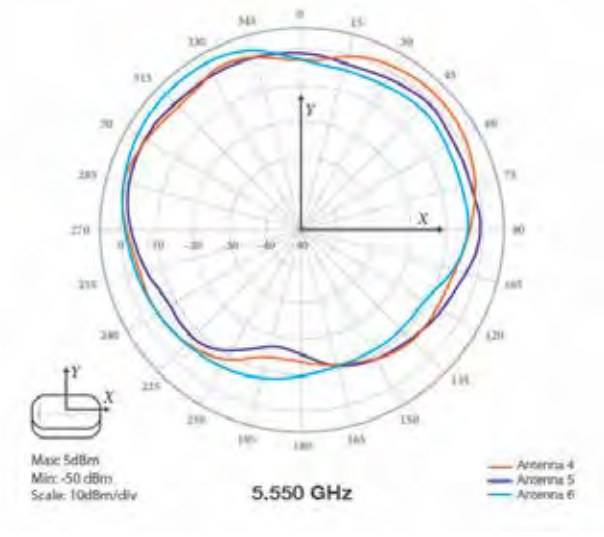


Elevation (Side View)

BSAP 2030 – 5 GHz (6 dBi)



Horizontal or Azimuth (Top View)



Elevation (Side View)

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Power and Sensitivity Tables

	Max TX Power*		Receive Sensitivity (Aggregate of Chains)	
	Operating at 802.3at PoE or AC/DC Power Adapter	**Operating at 802.3af PoE**		
802.11b 2.4 GHz				
1 Mbps	24 dBm	22 dBm	1 Mbps	-93 dBm
11 Mbps	24 dBm	22 dBm	11 Mbps	-90 dBm
802.11g 2.4 GHz				
6 Mbps	24 dBm	22 dBm	6 Mbps	-92 dBm
54 Mbps	21 dBm	19 dBm	54 Mbps	-76 dBm
802.11n 2.4 GHz HT20				
MCS0	23 dBm	21 dBm	MCS0	-90 dBm
MCS1	23 dBm	21 dBm		
MCS2	23 dBm	21 dBm		
MCS3	23 dBm	21 dBm		
MCS4	21 dBm	19 dBm		
MCS5	21 dBm	19 dBm		
MCS6	20 dBm	18 dBm		
MCS7	20 dBm	18 dBm	MCS7	-73 dBm
MCS8	23 dBm	21 dBm		
MCS9	23 dBm	21 dBm		
MCS10	23 dBm	21 dBm		
MCS11	23 dBm	21 dBm		
MCS12	21 dBm	19 dBm		
MCS13	21 dBm	19 dBm		
MCS14	20 dBm	18 dBm		
MCS15	20 dBm	18 dBm		
MCS16	23 dBm	21 dBm		
MCS17	23 dBm	21 dBm		
MCS18	23 dBm	21 dBm		
MCS19	23 dBm	21 dBm		
MCS20	21 dBm	19 dBm		
MCS21	21 dBm	19 dBm		
MCS22	20 dBm	18 dBm		
MCS23	20 dBm	18 dBm		

***Aggregate of chains operating at 802.3at PoE or AC/DC power adapter. Max TX power may be limited by operating at 802.3af, local regulatory domains (country) and band edge requirements.**

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Power and Sensitivity Tables

	Max TX Power*		Receive Sensitivity (Aggregate of Chains)	
	Operating at 802.3at PoE or AC/DC Power Adapter	**Operating at 802.3af PoE**		
802.11n 2.4 GHz HT40				
MCS0	22 dBm	20 dBm	MCS0	-88 dBm
MCS1	22 dBm	20 dBm		
MCS2	22 dBm	20 dBm		
MCS3	22 dBm	20 dBm		
MCS4	20 dBm	18 dBm		
MCS5	20 dBm	18 dBm		
MCS6	19 dBm	17 dBm		
MCS7	19 dBm	17 dBm	MCS7	-70 dBm
MCS8	22 dBm	20 dBm		
MCS9	22 dBm	20 dBm		
MCS10	22 dBm	20 dBm		
MCS11	22 dBm	20 dBm		
MCS12	20 dBm	18 dBm		
MCS13	20 dBm	18 dBm		
MCS14	19 dBm	17 dBm		
MCS15	14 dBm	17 dBm		
MCS16	22 dBm	20 dBm		
MCS17	22 dBm	20 dBm		
MCS18	22 dBm	20 dBm		
MCS19	22 dBm	20 dBm		
MCS20	20 dBm	18 dBm		
MCS21	20 dBm	18 dBm		
MCS22	19 dBm	17 dBm		
MCS23	19 dBm	17 dBm		

***Aggregate of chains operating at 802.3at PoE or AC/DC power adapter. Max TX power may be limited by operating at 802.3af, local regulatory domains (country) and band edge requirements.**

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Power and Sensitivity Tables

	Max TX Power*		Receive Sensitivity (Aggregate of Chains)	
	Operating at 802.3at PoE or AC/DC Power Adapter	**Operating at 802.3af PoE**		
802.11a 5 GHz				
6 Mbps	26 dBm	24dBm	6 Mbps	-89 dBm
54 Mbps	22 dBm	20 dBm	54 Mbps	-76 dBm
802.11n/ac 5 GHz HT20				
MCS0	25 dBm	23 dBm	MCS0	-92 dBm
MCS1	25 dBm	23 dBm	MCS1	-88 dBm
MCS2	25 dBm	23 dBm	MCS2	-88 dBm
MCS3	24 dBm	22 dBm	MCS3	-85 dBm
MCS4	24 dBm	22 dBm		
MCS5	23 dBm	21 dBm	MCS5	-83 dBm
MCS6	22 dBm	20 dBm		
MCS7	21 dBm	19 dBm	MCS7	-73 dBm
MCS8	20 dBm	18 dBm	MCS8	-68 dBm
MCS9	NA	NA	MCS9	N/A
802.11n/ac 5 GHz HT40				
MCS0	23 dBm	21 dBm	MCS0	-91 dBm
MCS1	23 dBm	21 dBm	MCS1	-85 dBm
MCS2	23 dBm	21 dBm	MCS2	-85 dBm
MCS3	23 dBm	21 dBm	MCS3	-80 dBm
MCS4	23 dBm	21 dBm		
MCS5	22 dBm	20 dBm	MCS5	-76 dBm
MCS6	21 dBm	19 dBm		
MCS7	20 dBm	18 dBm	MCS7	-71 dBm
MCS8	19 dBm	17 dBm	MCS8	-67 dBm
MCS9	19 dBm	17 dBm	MCS9	-66 dBm
802.11ac 5 GHz VHT80				
MCS0	23 dBm	21 dBm	MCS0	-89 dBm
MCS1	23 dBm	21 dBm	MCS1	-84 dBm
MCS2	23 dBm	21 dBm	MCS2	-84 dBm
MCS3	23 dBm	21 dBm	MCS3	-79 dBm
MCS4	23 dBm	21 dBm		
MCS5	22 dBm	20 dBm	MCS5	-75 dBm
MCS6	21 dBm	19 dBm		
MCS7	20 dBm	18 dBm	MCS7	-68 dBm
MCS8	19 dBm	17 dBm	MCS8	-65 dBm
MCS9	19 dBm	17 dBm	MCS9	-63 dBm

***Aggregate of chains operating at 802.3at PoE or AC/DC power adapter. Max TX power may be limited by operating at 802.3af, local regulatory domains (country) and band edge requirements.**

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Ordering Information

Choose Your Access Point

Choose Your AP	Part No.
Indoor APs	
Bluesocket 2030: 802.11a/b/g/n/ac, 3x3:3, six internal MIMO antennas	**1700948F1**
Bluesocket 2035: 802.11a/b/g/n/ac, 3x3:3, six external RP-SMA connectors	**1700949F1**

Choose Your Cloud

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

Licenses

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

Accessories

Power Supply and Antennas	
802.3af Compliant PoE Injector for BSAP 2030/2035	**1700926F1**
AC/DC Power Adapter for BSAP 2030/2035	**1700929F1**
Omnidirectional Antenna Bundle with 5 dBi gain for BSAP 2035	**1700957F1**
Dual Band High Density Antenna Bundle with 13/7 dBi gain (2.4/5GHz respectively) for BSAP 2035	**1700983F1**

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