

BLUESOCKET 1930/1935

High-Performance Dual Radio 802.11n Access Point

PRODUCT FEATURES

- 802.11a/b/g/n wireless access points supporting MIMO antenna technology
- Dual radio 2.4 GHz and 5 GHz
- Full 3x3:3 MIMO performance, offering data rates up to 450 Mbps per radio
- Fully functional with 802.3af Power over Ethernet (PoE)
- Mesh Networking
- User configurable maximum-associated clients per radio
- “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 configures optimal radio settings to maximize performance
- Integrated wireless intrusion detection system to identify rogue access points and wireless attacks
- Supports stateful firewall for highest security at the edge
- Dynamic Frequency Selection (DFS) supports more channels resulting in additional user capacity in high-density deployments
- Provides greater range through beamforming

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 1930 and 1935 indoor APs offer enterprise-grade performance, with three transmit and three receive streams providing data rates up to 450 Mbps per radio for a total of 900 Mbps per AP. The Bluesocket 1930 AP includes six MIMO internal antennas with up to 4dBi peak gain, and the Bluesocket 1935 includes six RP-SMA connectors for external antennas.

The Bluesocket 1930 and 1935 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 1930s 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 1930 and 1935 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.

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.

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.



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PRODUCT SPECIFICATIONS

Interfaces

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

Antenna

- **Bluesocket 1930:** Six Internal MIMO Antennas with 4dBi Gain
- **Bluesocket 1935:** 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
- Configurable Maximum Associated Clients per Radio
- Multicast/Broadcast to Unicast Conversion
- A-MPDU and A-MSDU Frame Aggregation
- HT20 and HT40 High Throughput
- Max Aggregate TX Power*
 - 2.4GHz: 24 dBm/250 mW
 - 5GHz: 20 dBm/100 mW
- Beamforming
- Dynamic Frequency Selection (DFS) and 802.11h (Europe)

Certifications

- Wi-Fi 802.11a/b/g/n 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
- Mesh Networking

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

*Aggregate of chains. May be limited by local regulatory domains (country) and band edge requirements.

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Environment

- **Operating:** 0° C to 50° C (32° F to 122° F)
- **Storage:** -40° C to 70° C (-40° F to 158° F)
- **Humidity:** 5% to 90% Typical

Physical

Bluesocket 1930 AP

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

Bluesocket 1935 AP

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

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

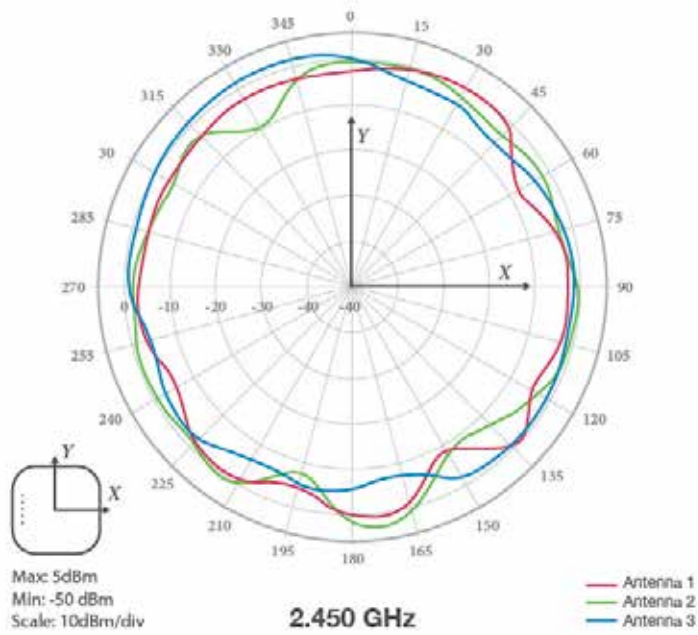
Warranty

- Limited Lifetime Warranty

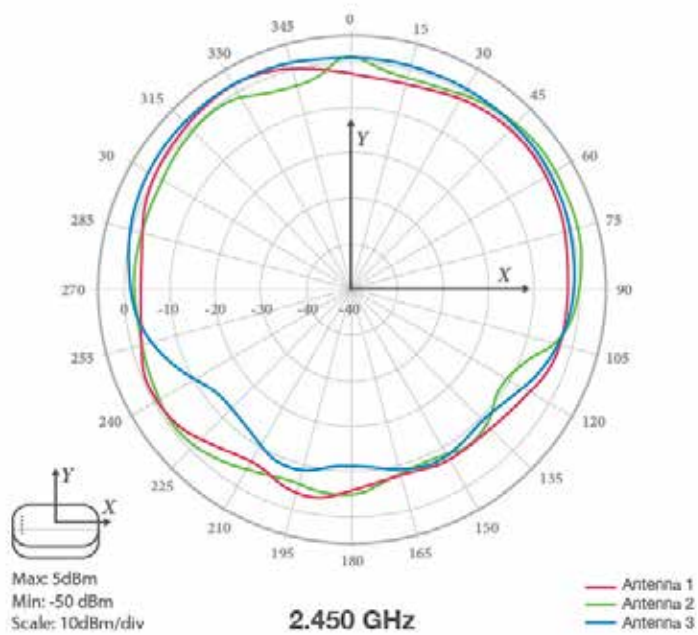
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ANTENNA PATTERNS

BSAP 1930 – 2.4 GHz



Horizontal or Azimuth (Top View)

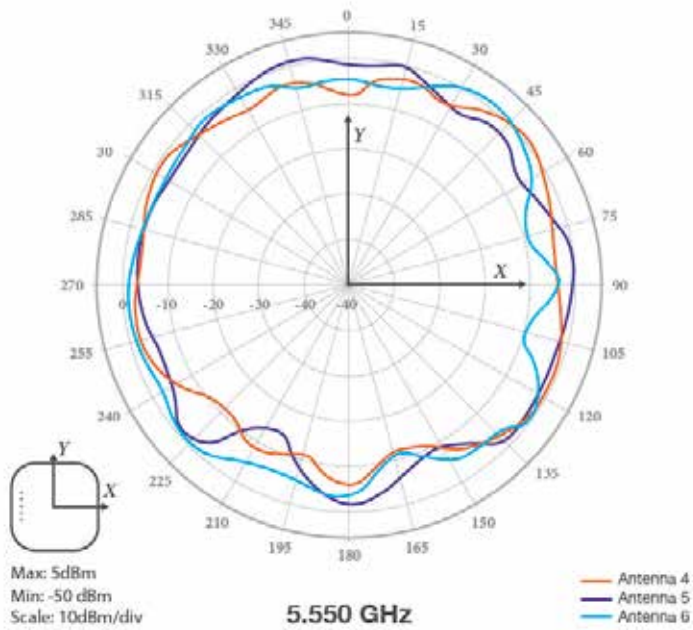


Elevation (Side View)

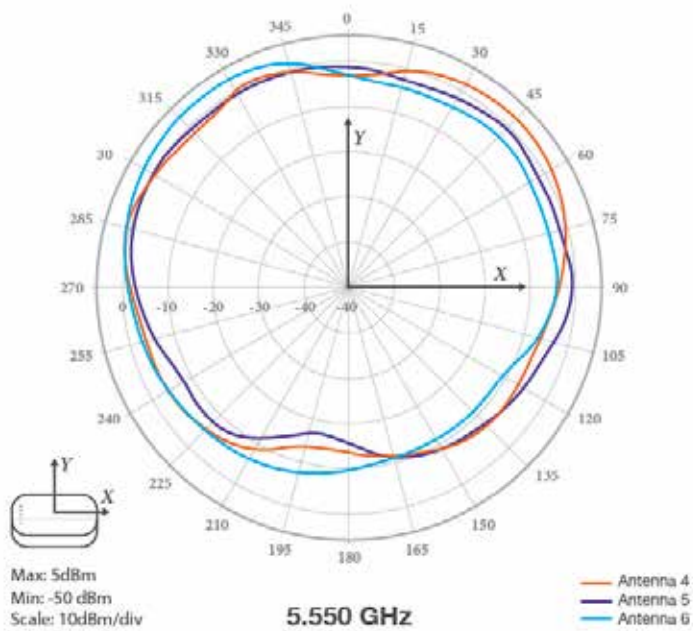
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ANTENNA PATTERNS

BSAP 1930 – 5 GHz



Horizontal or Azimuth (Top View)



Elevation (Side View)

BLUESOCKET 1930/1935

POWER AND SENSITIVITY TABLE

| | Max TX Power* | | Receive Sensitivity* |
|-----------------------------|---------------|------------|----------------------|
| 802.11b 2.4 GHz | | | |
| 1~2 Mbps | 24 dBm | 1 Mbps | -93 dBm |
| 5.5~11 Mbps | 23 dBm | 11 Mbps | -90 dBm |
| 802.11g 2.4 GHz | | | |
| 6~24 Mbps | 23 dBm | 6 Mbps | -92 dBm |
| 36 Mbps | 22 dBm | | |
| 48 Mbps | 21 dBm | | |
| 54 Mbps | 20 dBm | 54 Mbps | -76 dBm |
| 802.11n 2.4 GHz HT20 | | | |
| MCS0/MCS8/MCS16 | 22 dBm | MCS0/8/16 | -90 dBm |
| MCS1/MCS9/MCS17 | 21 dBm | | |
| MCS2/MCS10/MCS18 | 21 dBm | | |
| MCS3/MCS11/MCS19 | 21 dBm | | |
| MCS4/MCS12/MCS20 | 20 dBm | | |
| MCS5/MCS13/MCS21 | 20 dBm | | |
| MCS6/MCS14/MCS22 | 19 dBm | | |
| MCS7/MCS15/MCS23 | 19 dBm | MCS7/15/23 | -73 dBm |
| 802.11n 2.4 GHz HT40 | | | |
| MCS0/MCS8/MCS16 | 21 dBm | MCS0/8/16 | -88 dBm |
| MCS1/MCS9/MCS17 | 20 dBm | | |
| MCS2/MCS10/MCS18 | 20 dBm | | |
| MCS3/MCS11/MCS19 | 20 dBm | | |
| MCS4/MCS12/MCS20 | 19 dBm | | |
| MCS5/MCS13/MCS21 | 19 dBm | | |
| MCS6/MCS14/MCS22 | 18 dBm | | |
| MCS7/MCS15/MCS23 | 18 dBm | MCS7/15/23 | -70 dBm |

*Aggregate of chains. May be limited by local regulatory domains (country) and band edge requirements.

High-Performance Dual Radio 802.11n Access Point

POWER AND SENSITIVITY TABLE

| | Max TX Power* | | Receive Sensitivity* |
|---------------------------|---------------|------------|----------------------|
| 802.11a 5 GHz | | | |
| 6~24 Mbps | 20 dBm | 6 Mbps | -90 dBm |
| 36 Mbps | 17 dBm | | |
| 48 Mbps | 15 dBm | | |
| 54 Mbps | 13 dBm | 54 Mbps | -77 dBm |
| 802.11n 5 GHz HT20 | | | |
| MCS0/MCS8/MCS16 | 18 dBm | MCS0/8/16 | -88 dBm |
| MCS1/MCS9/MCS17 | 17 dBm | | |
| MCS2/MCS10/MCS18 | 17 dBm | | |
| MCS3/MCS11/MCS19 | 17 dBm | | |
| MCS4/MCS12/MCS20 | 15 dBm | | |
| MCS5/MCS13/MCS21 | 14 dBm | | |
| MCS6/MCS14/MCS22 | 13 dBm | | |
| MCS7/MCS15/MCS23 | 13 dBm | MCS7/15/23 | -76 dBm |
| 802.11n 5 GHz HT40 | | | |
| MCS0/MCS8/MCS16 | 17 dBm | MCS0/8/16 | -86 dBm |
| MCS1/MCS9/MCS17 | 16 dBm | | |
| MCS2/MCS10/MCS18 | 16 dBm | | |
| MCS3/MCS11/MCS19 | 16 dBm | | |
| MCS4/MCS12/MCS20 | 14 dBm | | |
| MCS5/MCS13/MCS21 | 14 dBm | | |
| MCS6/MCS14/MCS22 | 13 dBm | | |
| MCS7/MCS15/MCS23 | 13 dBm | MCS7/15/23 | -72 dBm |

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ORDERING INFORMATION

Choose Your Access Point

| Choose Your AP | Part Number |
|--|------------------|
| Indoor APs | |
| Bluesocket 1930: 802.11a/b/g/n, 3x3:3, six internal MIMO antennas | 1700950F1 |
| Bluesocket 1935: 802.11a/b/g/n, 3x3:3, six external RP-SMA connectors | 1700951F1 |

Choose Your Cloud

| Public Cloud – ProCloud | Part Number |
|---|--|
| ProCloud for Indoor AP | NBD |
| One Year | 1100MSPH200112 |
| Three Years | 1100MSPH200136 |
| Five Years | 1100MSPH200160 |
| Public Cloud – ProCloud Plus | Part Number |
| ProCloud Plus for Indoor AP | NBD |
| One Year | 1100MSPM200112 |
| Three Years | 1100MSPM200136 |
| Five Years | 1100MSPM200160 |
| Private Cloud | Part Number |
| FREE vWLAN Virtual Appliance (VMware) (\$1995 value) | Download Only (www.adtran.com/downloadvwlan) |
| vWLAN 1U Rackmount Appliance (Hardware) | 1700900F2 |
| vWLAN Desktop Appliance (Hardware) | 1700918F1 |

Licenses

| Software License | Part Number |
|--|------------------|
| 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 | Part Number |
|--|------------------|
| 802.3af Compliant PoE Injector for BSAP 1930/1935 | 1700926F1 |
| AC/DC Power Adapter for BSAP 1930/1935 | 1700929F1 |
| Antenna Bundle for BSAP 1930/1935 | 1700931F1 |

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