

BLUESOCKET 1920/1925

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 2x2:2 MIMO performance, offering data rates up to 300 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
- Integrated stateful firewall for highest security at the edge
- 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.

Cost-Effective, High-Performance Solution

The Bluesocket 1920 and 1925 APs offer enterprise-grade performance, with two transmit and two receive streams providing data rates up to 300 Mbps per radio for a total of 600 Mbps per AP.

The Bluesocket 1920 and 1925 APs come in a revolutionary, smoke detector style, cost-effective package that is ideal for educational institutions, small and medium enterprises (SMEs), and large enterprises who are on a tight budget but cannot compromise on performance. The APs offer higher receive sensitivity on both the 2.4 GHz and 5 GHz radios to compensate for Bring Your Own Device (BYOD) type handheld devices such as smartphones and tablets that have a fraction of the transmit power of traditional laptops. This results in more reliable wireless coverage for an improved end-user experience.

The Bluesocket 1920 AP includes four MIMO internal antennas with up to 4dBi peak gain, and the Bluesocket 1925 AP includes four RP-SMA connectors for external antennas. The Bluesocket 1920 and 1925 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 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 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 1920:** Four Internal MIMO Antennas with up to 4dBi Peak GGain
- **Bluesocket 1925:** Four 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
 - 2.4 Ghz: 20 dBm/100 mW
 - 5 Ghz: 20 dBm/100 mW
- Beamforming

Certifications

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

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

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

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Environment

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

Physical

Bluesocket 1920 AP

- **Dimensions:** DIA 6.3 in. (160 mm), H 1.5 in. (35 mm)
- **Weight:** .44 lbs (0.2 kg)

Bluesocket 1925 AP

- **Dimensions:** DIA 6.3 in. (160 mm), H 1.5 in. (35 mm)
- **Weight:** .44 lbs (0.2 kg)

Power

- 802.3af Compliant PoE
- 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

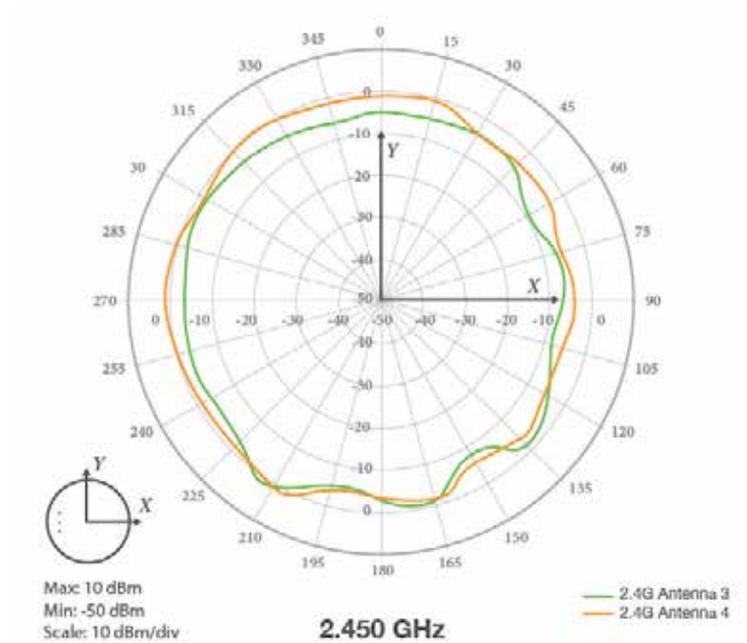
Warranty

- Limited Lifetime Warranty

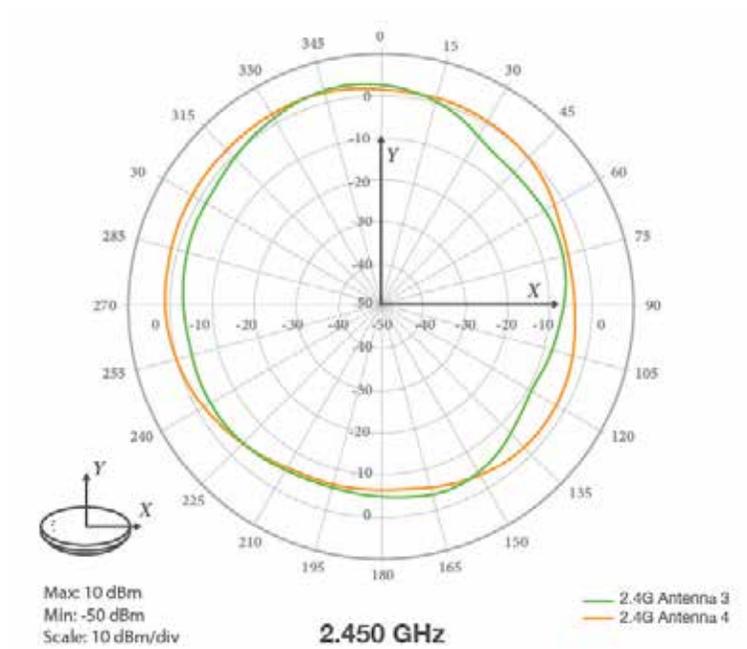
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ANTENNA PATTERNS

BSAP 1920 – 2.4 GHz



Horizontal or Azimuth (Top View)

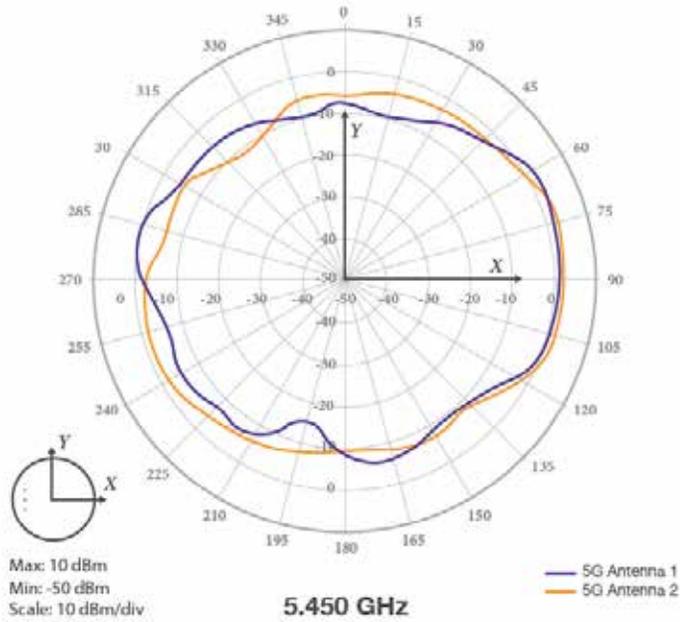


Elevation (Side View)

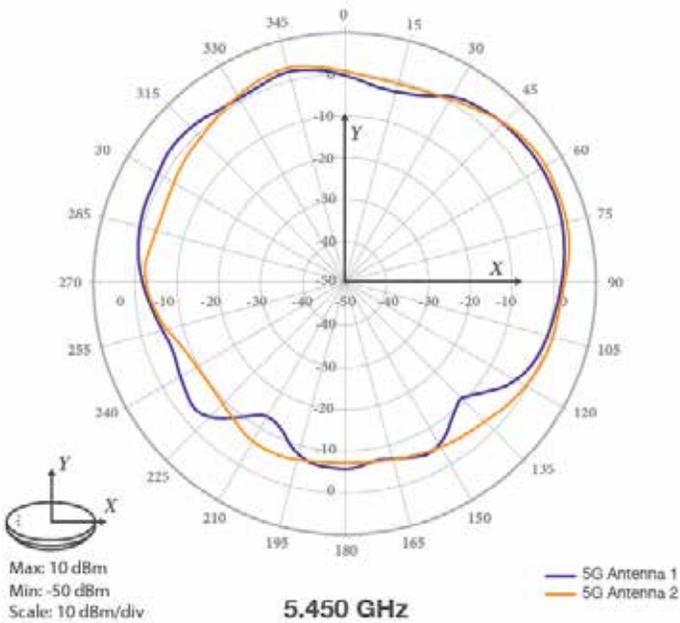
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ANTENNA PATTERNS

BSAP 1920 – 5 GHz



Horizontal or Azimuth (Top View)



Elevation (Side View)

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POWER AND SENSITIVITY TABLE

	Max TX Power*		Receive Sensitivity*
802.11b 2.4 GHz			
1~11 Mbps	20 dBm	1 Mbps	-93 dBm
			-90 dBm
802.11g 2.4 GHz			
6~24 Mbps	20 dBm	6 Mbps	-92 dBm
36 Mbps	20 dBm		
48 Mbps	20 dBm		
54 Mbps	17 dBm	54 Mbps	-76 dBm
802.11n 2.4 GHz HT20			
MCS0/MCS8/MCS16	20 dBm	MCS0/8/16	-92 dBm
MCS1/MCS9/MCS17	20 dBm		
MCS2/MCS10/MCS18	20 dBm		
MCS3/MCS11/MCS19	20 dBm		
MCS4/MCS12/MCS20	20 dBm		
MCS5/MCS13/MCS21	20 dBm		
MCS6/MCS14/MCS22	19 dBm		
MCS7/MCS15/MCS23	17 dBm	MCS7/15/23	-70 dBm
802.11n 2.4 GHz HT40			
MCS0/MCS8/MCS16	20 dBm	MCS0/8/16	-92 dBm
MCS1/MCS9/MCS17	20 dBm		
MCS2/MCS10/MCS18	20 dBm		
MCS3/MCS11/MCS19	20 dBm		
MCS4/MCS12/MCS20	20 dBm		
MCS5/MCS13/MCS21	20 dBm		
MCS6/MCS14/MCS22	19 dBm		
MCS7/MCS15/MCS23	17 dBm	MCS7/15/23	-68 dBm

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

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POWER AND SENSITIVITY TABLE

	Max TX Power*		Receive Sensitivity*
802.11a 5 GHz			
6~24 Mbps	20 dBm	6 Mbps	-90 dBm
36 Mbps	20 dBm		
48 Mbps	20 dBm		
54 Mbps	17 dBm	54 Mbps	-75 dBm
802.11n 5 GHz HT20			
MCS0/MCS8/MCS16	20 dBm	MCS0/8/16	-87 dBm
MCS1/MCS9/MCS17	20 dBm		
MCS2/MCS10/MCS18	20 dBm		
MCS3/MCS11/MCS19	20 dBm		
MCS4/MCS12/MCS20	20 dBm		
MCS5/MCS13/MCS21	20 dBm		
MCS6/MCS14/MCS22	19 dBm		
MCS7/MCS15/MCS23	17 dBm	MCS7/15/23	-70 dBm
802.11n 5 GHz HT40			
MCS0/MCS8/MCS16	20 dBm	MCS0/8/16	-86 dBm
MCS1/MCS9/MCS17	20 dBm		
MCS2/MCS10/MCS18	20 dBm		
MCS3/MCS11/MCS19	20 dBm		
MCS4/MCS12/MCS20	20 dBm		
MCS5/MCS13/MCS21	20 dBm		
MCS6/MCS14/MCS22	19 dBm		
MCS7/MCS15/MCS23	17 dBm	MCS7/15/23	-66 dBm

*Aggregate of chains. Max TX Power may be limited by local regulatory

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ORDERING INFORMATION

Choose Your Access Point

Choose Your AP	Part Number
Indoor APs	
Bluesocket 1920: 802.11a/b/g/n, 2x2:2, four internal MIMO antennas	1700954F1
Bluesocket 1925: 802.11a/b/g/n, 2x2:2, four external RP-SMA connectors	1700955F1

Choose Your Cloud

Public Cloud – ProCloud	Part Number	Part Number
ProCloud for Indoor AP	NBD	7x24x4
One Year	1100MSPH200112	1100MSPH300112
Three Years	1100MSPH200136	1100MSPH300136
Five Years	1100MSPH200160	1100MSPH300160
Public Cloud – ProCloud Plus	Part Number	Part Number
ProCloud Plus for Indoor AP	NBD	7x24x4
One Year	1100MSPM200112	1100MSPM300112
Three Years	1100MSPM200136	1100MSPM300136
Five Years	1100MSPM200160	1100MSPM300160
Private Cloud	Part Number	
FREE vWLAN Virtual Appliance (VMware) (\$1995 value)		Download Only (www.adtran.com/downloadvwan)
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 1920/1925	1700926F1
AC/DC Power Adapter for BSAP 1920/1925	1700928F1
Antenna Bundle for BSAP 1920/1925	1700932F1

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TL9000

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