

Bluesocket 6000 Series

6020

Dual Band Wi-Fi 6 indoor access point



Low TCO



Zero-Touch



Gigabit



Wi-Fi 6

Benefits

- Enterprise-Class Wi-Fi 6 (802.11ax) Indoor Access Point
- Full 2x2:2 SU and MU-MIMO Performance, Offering Aggregated Data Rates up to 1.7 Gbps
- Bi-directional OFDMA Uses Air Resource for Access Points and Client Device Efficiency
- BSS Coloring Technology to Uniquely Distinguish Traffic for Higher Efficiency in Dense Deployments
- Built-in Powerful Qualcomm Quad-Core CPU for Driving and Boosting Performance Effectively
- Fully Functional with 802.3af Power Over Ethernet (PoE)
- “Zero-Touch” Deployments Automatically Discover VLAN, and Download Firmware and Configurations
- Dynamic RF for Automatic Channel, TX Power, and Neighbor Discovery
- Provides Class of Service (CoS) Levels for Prioritizing Multi-Users and Multiservices
- Stateful Firewall at the Edge and WPA3 Encryption for Added Security
- Fully Compliant with Wi-Fi 6 Standards and Backwards Compatible with Wave2/ac/a/b/g/n Client Devices

Overview

The Bluesocket 6020 Access Point (AP) offers the latest Wi-Fi 6 technology. It is a perfect fit for enterprises of all sizes, including educational institutions, retail, hospitality, and healthcare providers looking to move their organizations to a pervasive mobility environment.

It offers enterprise-grade performance and reliable coverage in high-density wireless environments like indoor arenas, conference centers, libraries, and other high-traffic areas. It supports two transmit and two receive streams providing data rates up to 1.7 Gbps (1.2 Gbps for 5GHz and 574 Mbps for 2.4GHz) per AP. In addition, the Bluesocket 6020 includes four Multi-User MIMO (MU-MIMO) internal antennas with up to 3dBi peak gain and is fully functional when powered by an 802.3af PoE solution.

Wi-Fi 6

The Bluesocket 6020 supports advanced Wi-Fi 6 features including:

- MU-MIMO with Beamforming allows the handling of more concurrent clients in parallel, therefore, boosting network capacity. Beamforming strengthens the overall Wi-Fi signal.
- Orthogonal Frequency-Division Multiple Access (OFDMA) allows a single transmission to be split by frequency within a channel, allowing greater scale and the efficiency to deliver varying traffic.
- Basic Service Set (BSS) Coloring is perfect for high-density applications. It “color-codes” shared frequencies and maximizes performance.

- Advanced 1024-Quadrature Amplitude Modulation (QAM) allows the Bluesocket 6020 to carry more packets at one time, delivering higher data rates.
- Target Wake Time (TWT) is perfect for IoT applications. This allows devices to determine how frequently they will wake up to send or receive data, therefore conserving battery life.

Unsurpassed security

Context-Aware Access Control (with Layer7 Device Fingerprinting) allows for defining security policies based on users, device types, ownership, location, and schedules. As a result, businesses can separate guests from business-sensitive traffic, ensuring the highest levels of network security.

For added security, Wireless Intrusion Detection (WIDS) is used to detect and isolate rogue access points in the network, therefore stopping spoofing of network assets.

Cloud-based administration

Adtran’s virtual Wireless LAN® (vWLAN®) is the industry’s premier wireless LAN cloud-management solution. vWLAN is simple yet powerful: simple in that it is intuitive, easy to learn, set up, and use, and powerful with unmatched visibility, security, reliability, scalability, and performance. Adtran also offers the most flexible deployment options, including public cloud (Adtran Datacenter) or private cloud (on-premises), with the freedom to migrate between them.

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Product specifications

Interfaces

- 1 – 10/100/1000Mbps Base-T RJ-45

Access Point Type

- Indoor, Dual Radios Concurrent
- SU-MIMO
 - Two (2) 2.4GHz Spatial Stream
 - Two (2) 5GHz Spatial Streams Totaling 1.7 Gbps
- MU-MIMO
 - MU-MIMO Allows Multiple Spatial Streams to be Allocated to Different Clients Simultaneously on Both Download and Upload Sides

Radio Frequency

- 2.4GHz:
 - 2400MHz ~ 2472MHz
- 5GHz:
 - 5150MHz ~ 5250MHz
 - 5250MHz ~ 5350MHz
 - 5470MHz ~ 5725MHz
 - 5725MHz ~ 5850MHz

Transmit Power (Maximum Value)

- 2.4GHz: 22dBm
- 5GHz: 22dBm

Antenna

- Internal Antenna (Peak Gain)
 - Wi-Fi 2.4GHz and 5GHz : 3 dBi

Status LEDs

- Power
- LAN
- 2.4GHz Radio
- 5GHz Radio

Security

- WPA3 Open/OWE (Opportunistic Wireless Encryption)
- WPA2/WPA3-Personal
- WPA2/WPA3-Enterprise (802.1X)
- 802.1X Port-Based Authentication
- WMM (802.11e)
- EAP-PEAP
- EAP-FAST
- EAP-TLS
- EAP-SIM
- EAP-AKA

Power

- 802.3af Compliant
- Power Over Ethernet
- External 12V DC 1.5A
- Power Adapter Max
- Power: 11.9 Watts

Chassis

- Plastic Enclosure
- Dimensions: 6.3 in. x 6.3 in. x 1.3 in. (16 cm x 16 cm x 33.2 cm) (H x W x D)
- Weight: <1 lbs. (.38 Kg)

Mounting

- Wall/Ceiling Mount With Included Accessories
- Pole Mount With Included Accessories 9/16" and 15/16" T-Rail
- Junction Box Mounting Kit Sold Separately

Environmental

- Operating Temperature: 32° to 104°F (0° to 40°C)
- Storage Temperature: -40° to 176°F (-40°C to 80°C)
- Relative Humidity: Up to 90%

Agency Approvals

- Electrical/Safety Compliance
- UL 1950

Radio Approvals

- FCC Part 15 B
- FCC Part 15.247
- FCC Part E 15.407
- FCC Part 15.107
- FCC Part 15.109

Warranty

- Limited Lifetime Warranty

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RF performance specifications

Channel	Data rate	Transmit Power (Aggregated, dBm)	Receive Sensitivity (Aggregated, dBm)
802.11b 2.4GHz	1 Mbps	22	-95
	11 Mbps	22	-87
802.11g 2.4GHz	6 Mbps	22	-88
	54 Mbps	20	-73
802.11a 5GHz	6 Mbps	22	-88
	54 Mbps	21	-73
802.11n HT20 2.4GHz	MCS 0 / 8	22	-88
	MCS 9 / 15	20	-68
802.11n HT40 2.4GHz	MCS 0 / 8	21	-85
	MCS 7 / 15	19.5	-68
802.11n HT20 5GHz	MCS 0 / 8	22	-88
	MCS 9 / 15	21	-69
802.11n HT40 5GHz	MCS 0 / 8	22	-84
	MCS 9 / 15	20.5	-67
802.11ac VHT20 5GHz	MCS0	22	-87
	MCS8	20	-64
802.11ac VHT40 5GHz	MCS0	22	-84
	MCS9	19	-61
802.11ac VHT80 5GHz	MCS0	22	-81
	MCS9	19	-57
802.11ax HE20 2.4GHz	MCS0	22	-88
	MCS11	15.5	-64
802.11ax HE40 2.4GHz	MCS0	22	-85
	MCS11	16.5	-64
802.11ax HE20 5GHz	MCS0	22	-87
	MCS11	17.5	-60
802.11ax HE40 5GHz	MCS0	22	-84
	MCS11	17.5	-57
802.11ax HE80 5GHz	MCS0	22	-81
	MCS11	17.5	-53

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Ordering information

1. Choose Your Access Point		Part No.
Bluesocket 6020: Wi-Fi 6 (802.11ax), Indoor 2x2:2		1700971F1
2. Choose Your Cloud		
Cloud-Managed: Elite Cloud	Next Business Day	Next Business Day w/ Onsite Tech
One Year	1100MSPH200112	
Three Year	1100MSPH200136	
Five Year	1100MSPH200160	
Cloud-Managed: Elite Cloud Plus		
One Year	1100MSPM200112	1100MSPM400112
Three Year	1100MSPM200136	1100MSPM400136
Five Year	1100MSPM200160	1100MSPM400160
Private Cloud		
FREE Instance of vWLAN for your VMware (\$1995 value)	Download today adtran.com/downloadVWLAN	



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