

Bluesocket 6000 Series

6040

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 4x4:4 SU and MU-MIMO Performance, Offering Aggregated Data Rates up to 3.5 Gbps Per Radio
- Bidirectional OFDMA Utilizes 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 802.3at Power Over Ethernet (PoE+)
- “Zero-Touch” Deployments Automatically Discover vWLAN, and Download Firmware and Configurations
- Dynamic RF for Automatic Channel, TX Power, and Neighbor Discovery
- Bluetooth 5.0/LE Radio for Beacon or Lot Applications
- 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 Standard and Backwards Compatible With Wave2/ac/a/b/g/n Client Devices

Overview

The Bluesocket 6040 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.

The Bluesocket 6040 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 four transmit and four receive streams providing data rates up to 3.5 Gbps (2.4 Gbps for 5 GHz and 1.1 Gbps for 2.4 GHz) per AP. In addition, the Bluesocket 6040 includes four MU-MIMO internal antennas with up to 5dBi peak gain and is fully functional when powered by a 802.3at PoE+ solution.

Wi-Fi 6

The Bluesocket 6040 supports advanced Wi-Fi 6 features including:

- Multi-User MIMO (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 6040 to carry more packets at a time, delivering higher data rates.
- Target Wake Time (TWT) feature is perfect for IoT applications. It allows devices to determine how frequently they will wake up to send or receive data conserving battery life.

Unsurpassed Security

Context-Aware Access Control (with Layer 7 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 (W-IDS) is used to detect and isolate rogue access points in the network, stopping network asset spoofing.

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, 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.

Product Specifications

Interfaces

- Port 1 – 10/100/1000/2500Mbps Base-T RJ-45 (POE+ IN)
- Port 2 – 10/100/1000Mbps Base-T RJ-45
- USB 2.0 (Type-A) Port

Access Point Type

- Indoor, Dual Radios Concurrent
- SU-MIMO
 - Four (4) 2.4GHz Spatial Stream and
 - Four (4) 5GHz Spatial Streams Totaling 3.5 Gbps
- MU-MIMO
 - MU-MIMO Allows Multiple Spatial Streams to be Allocated to Different Clients Simultaneously on Both Download and Upload Sides
- BT/BLE 5.0 Radio Available
- 5GHz/2.4GHz 802.11a/b/g/n/ac/ax 1x1 Selectable Scanning Radio Available

Radio Frequency

- 2.4GHz: 2400MHz ~ 2496MHz,
- 5GHz:
 - 5150MHz ~ 5250MHz
 - 5250MHz ~ 5350MHz
 - 5470MHz ~ 5725MHz
 - 5725MHz ~ 5850MHz

Transmit Power (Maximum Value)

- 2.4GHz: 23dBm
- 5GHz: 23dBm

Antenna

- Internal Antenna (Peak Gain)
- Wi-Fi 2.4GHz & 5GHz: 5 dBi
- Scanning Radio
 - 2.4GHz/5GHz : 2 dBi
 - BT/BLE 5.0 : 2 dBi

Status LEDs

- Power
- LAN 1
- LAN 2
- 2.4GHz Radio
- 5GHz Radio
- Scanning Radio

Security

- WPA3 Open/OWE (Opportunistic Wireless Encryption)
- WPA/WPA2/WPA3-Personal
- WPA/WPA2/WPA3-Enterprise (802.1X)
- 802.1X Port-Based Authentication
- Open System (WEP-64/128)
- Shared System (WEP-64/128) EAP-TTLS
- WMM (802.11e)
- EAP-PEAP
- EAP-FAST
- EAP-TLS
- EAP-SIM
- EAP-AKA

Power

- 802.3at (PoE+) Compliant
- External 12V DC Power Adapter
- Max Power: 24 Watts (USB included)

Chassis

- Plastic Enclosure
- Dimensions: 8 in. x 8 in. x 1.3 in. (20.5 cm x 20.5 cm x 3.4 cm) (H x W x D)
- Weight: 3 lbs. (1.36 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

Environment

- Operating Temperature: 32° to 104°F (0° to 40°C)
- Storage Temperature: -40° to 158°F (-40°C to 70°C)
- Relative Humidity: Up to 95%, Non-Condensing

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

RF Performance Specification

| Channel | Data rate | Typical AVG. Tx Power Per-Chain (dBm) Tolerance = +/- 1.5 dB Measure at Board Connector | Min. Rx Sensitivity Per-Chain (dBm) Tolerance = +/- 1.5 dB Measure at Board Connector |
|----------------------|----------------------|---|---|
| 802.11b 2.4 GHz | 1 Mbps | 17 | -99 |
| | 11 Mbps | 17 | -90 |
| 802.11g 2.4 GHz | 6 Mbps | 17 | -94 |
| | 54 Mbps | 15 | -77 |
| 802.11a 5 GHz | 6 Mbps | 17 | -92 |
| | 54 Mbps | 16 | -75 |
| 802.11n HT20 2.4 GHz | MCS 0 / 8 / 16 / 24 | 17 | -95 |
| | MCS 7 / 15 / 23 / 31 | 15 | -76 |
| 802.11n HT40 2.4 GHz | MCS 0 / 8 / 16 / 24 | 16 | -91 |
| | MCS 7 / 15 / 23 / 31 | 14.5 | -74 |
| 802.11n HT20 5GHz | MCS 0 / 8 / 16 / 24 | 17 | -93 |
| | MCS 7 / 15 / 23 / 31 | 16 | -75 |
| 802.11n HT40 5GHz | MCS 0 / 8 / 16 / 24 | 17 | -90 |
| | MCS 7 / 15 / 23 / 31 | 15.5 | -73 |
| 802.11ac VHT20 5GHz | MCS0 | 17 | -93 |
| | MCS8 | 15 | -70 |
| 802.11ac VHT40 5GHz | MCS0 | 17 | -90 |
| | MCS9 | 14 | -67 |
| 802.11ac VHT80 5GHz | MCS0 | 17 | -88 |
| | MCS9 | 13 | -63 |
| 802.11ax HE20 2.4GHz | MCS0 | 17 | -94 |
| | MCS11 | 10.5 | -65 |
| 802.11ax HE40 2.4GHz | MCS0 | 16 | -91 |
| | MCS11 | 11 | -63 |
| 802.11ax HE20 5GHz | MCS0 | 17 | -93 |
| | MCS11 | 10.5 | -63 |
| 802.11ax HE40 5GHz | MCS0 | 17 | -91 |
| | MCS11 | 10.5 | -61 |
| 802.11ax HE80 5GHz | MCS0 | 17 | -87 |
| | MCS11 | 10.5 | -59 |

6040

Ordering Information

| 1. Choose Your Access Point | | Part No. |
|---|--|----------------|
| Bluesocket 6040: Wi-Fi 6 (802.11ax), Indoor 4x4:4 | | 1700972F1 |
| 2. Choose Your Cloud | | |
| Public Cloud – Elite Cloud | Next Business Day | 7x24x4 |
| One Year | 1100MSPH200112 | 1759500F3 |
| Three Year | 1100MSPH200136 | 17595L10XF1 |
| Five Year | 1100MSPH200160 | 17595P10XF1 |
| Public Cloud – 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 | |



Adtran Corporate Headquarters
 901 Explorer Boulevard
 Huntsville, AL 35806
 USA
adtran.com
sales@adtran.com

Adtran Europe Limited
 Building 2200 Basing View
 Basingstoke RG-21 4EQ, UK
contact@adtran.com

Adtran GmbH
 Jean-Monnet-Straße 4,
 10557 Berlin, Germany
kontakt@adtran.com

Adtran Networks Pty. Limited
 L5 330 Collins Street
 Melbourne, Victoria, 3000
 Australia
australia@adtran.com

61700972F1-8D

August Copyright © 2022 Adtran, Inc. All rights reserved. Adtran believes the information in this publication to be accurate as of publication date, and is not responsible for errors. Specifications subject to change without notice. Adtran and the other trademarks listed at www.adtran.com/trademarks are registered trademarks of Adtran, Inc. or its affiliates in various countries. All other trademarks mentioned in this document are the property of their respective owners.

Adtran warranty duration and entitlements vary by product and geography. For specific warranty information, visit www.adtran.com/warranty

Adtran products may be subject to U.S. export controls and other trade restrictions. Any export, re-export, or transfer of the products contrary to law is prohibited. For more information regarding exportation of Adtran items (e.g. commodities, technology, software), please visit www.adtran.com/exporthlicense.



ISO 9001
 ISO 14001
 TL 9000