

# BT11 Access Point

## Enterprise-Grade Bluetooth® LE

Juniper built the first AI-driven wireless platform, designed specifically for the Smart Device Era. The Juniper AI-Driven Network makes wireless networking predictable, reliable, and measurable by providing unprecedented visibility into the user experience and by replacing time-consuming manual IT tasks with proactive automation. In addition, Juniper is the first vendor to bring enterprise-grade Wi-Fi, Bluetooth® LE, and IoT together to deliver personalized, location-based wireless services without requiring battery-powered beacons.

### JUNIPER AI-DRIVEN NETWORK COMPONENTS

#### The Juniper Mist™ Cloud Architecture

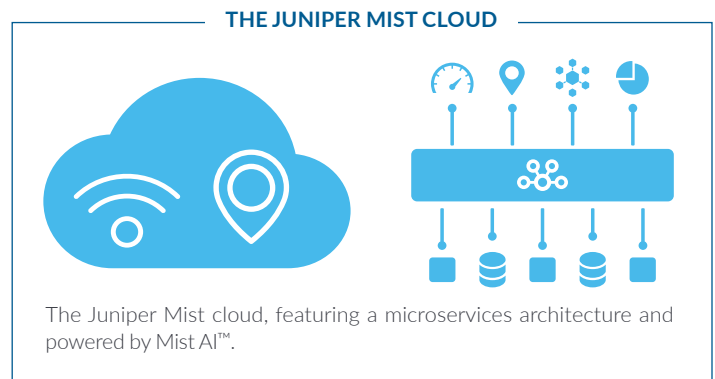
All wireless deployment, setup, operations, and insights are handled via the Juniper Mist Cloud, which was designed to provide unprecedented visibility and control at Web scale. A microservices architecture provides maximum agility when rolling out new features/services.

### Juniper Access Point Family

The Juniper enterprise-grade access point family consists of:

- BT11, which supports Bluetooth LE
- AP12, AP32, AP33, AP43, and AP63 Series, which support 802.11ax (Wi-Fi 6), Bluetooth LE, and IoT
- AP21, AP41, and AP61 Series, which support 802.11ac Wave 2, Bluetooth LE, and IoT

These access points are all built on a real-time microservices platform and are managed by the Juniper Mist cloud.



	AP43	AP61	AP41	AP21	BT11
Deployment	Indoor	Outdoor	Indoor	Indoor	Indoor
Wi-Fi Standard	802.11ax (Wi-Fi 6) 4x4 : 4	802.11ac Wave2 4x4 : 4	802.11ac Wave2 4x4 : 4	802.11ac Wave2 2x2 : 2	—
Wi-Fi Tri-Radio	✓	✓	✓	—	—
Antenna Options	Internal/External	Internal/External	Internal/External	Internal	Internal
Virtual Bluetooth LE	✓	✓	✓	✓	✓
IoT Interface	✓	—	✓	—	—
IoT Sensors	Humidity, Pressure, Temperature	—	—	—	—
Warranty	Limited Lifetime	1 Year	Limited Lifetime	Limited Lifetime	Limited Lifetime

### JUNIPER MIST MOBILE ENGAGEMENT

Push location-based information to mobile users, such as turn-by-turn directions and messages.

### JUNIPER MIST ASSET VISIBILITY

DWELL TIME	
22s	26s
VISITS	
54	49
VISITS BY HOUR	
12	15
Max	Avg

Immediately locate high-value resources and analyze traffic patterns.

## JUNIPER PATENTED TECHNOLOGY AND ML EASE DEPLOYMENT, ENSURE LOCATION ACCURACY

### Let's Get Virtual

Patented virtual Bluetooth LE (vBLE) technology lets you deploy and move virtual beacons with the simple click of a mouse (or via APIs), eliminating the need for physical beacons.

**BLUETOOTH LE LOCATION SERVICES**

The BT11 works with the Juniper Mist cloud to provide high-accuracy enterprise-grade Bluetooth LE location services using virtual beacons.

### Machine Learning Eliminates Manual Calibration

Juniper continuously collects data in real-time from all mobile devices to ensure accurate location estimates without the need for Bluetooth LE site surveys.

### Best Location Accuracy and Performance

Dynamic vBLE 16 antenna elements in Juniper APs plus machine learning in the Juniper Mist cloud ensure accuracy within 1 to 3 meters for mobile devices, and in-room/zone-level accuracy for Bluetooth LE assets.

### Premium Analytics

Juniper Mist's User Engagement and Asset Visibility service includes a base capability for analyzing up to 30 days of data, from which you can extract network insights across your enterprise that help you properly align your support resources or introduce enhanced premium services.

For enterprises that need to extend the timeline of data beyond 30 days or access other third-party\* solutions with customizable\* reporting to better understand shopper and guest behavior, Juniper Mist Premium Analytics Subscription service is available.

**JUNIPER MIST PREMIUM ANALYTICS**

### Real-Time Visibility

Juniper gives you a real-time view of the RF environment from the mobile user's perspective. This lets you detect coverage holes and other issues, even as users move around and their RF coverage patterns change.

### Open APIs for Easy Integration

Juniper offers a mobile SDK for iOS and Android with three types of APIs (vBLE beacon, indoor location, and zone analytics) for seamless integration with complementary products.

## HOW JUNIPER vBLE WORKS

**Bluetooth LE Engagement**

**How vBLE Engagement Works:**

1. Create unlimited virtual beacons anywhere
2. Mobile devices listen to vBLE beacons from AP
3. Mobile SDK (in mobile app) sends information to Juniper Mist Cloud
4. Juniper Mist Cloud sends real-time location and map info to app

**Bluetooth LE Asset Visibility**

**How vBLE Visibility Works:**

1. Juniper AP receives vBLE signals from third-party tags
2. Juniper APs send information to Juniper Mist cloud (via Rest APIs)
3. Juniper Mist cloud displays location

\*Juniper Mist Premium Analytics service subscription is needed

SPECIFICATIONS	BT11
Power Options	802.3af or 802.3at PoE
Dimensions	203mm x 203mm x 40mm (7.99in x 7.99in x 1.57in)
Weight	0.636 kg (1.4 lbs)
Operating Temperature	Internal antenna 0° to 40° C
Operating Humidity	10% to 90% maximum relative humidity, non-condensing
Operating Altitude	3,048m (10,000 ft)
Electromagnetic Emissions	FCC Part 15 Class B
I/O	1 - 10/100/1000BASE-T auto-sensing RJ-45 with PoE In 1 - 10/100/1000BASE-T auto-sensing RJ-45 with 48Vdc PoE Out
RF	2.4GHz BLE with Dynamic Antenna Array
Indicators	Multi-color status LED
Compliance Standards	UL 60950-1 CAN/CSA-C22.2 No. 60950-1 FCC Part 15.247, 15.407, 15.107, and 15.109 RSS-247 ICES-003 (Canada)

I/O PORTS & ACCESSORIES	
Reset	Reset to factory default settings
Eth1+PoE Out	8-pin interface for digital I/O and analog input (0 to +5V)
Eth1+PoE In	USB2.0 support interface

ORDERING INFORMATION	
US/FCC Domain	BT11-US (Internal Antenna)
Rest of the World	BT11-WW (Internal Antenna)

**JUNIPER OMNIDIRECTIONAL BLUETOOTH ANTENNA ARRAY**

