



AP61 Access Point

Outdoor Wi-Fi and Bluetooth® LE

Mist built the first AI-driven wireless platform, designed specifically for the Smart Device Era. Mist's Learning Wireless LAN (WLAN) makes Wi-Fi 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, Mist 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.

THE MIST LEARNING WLAN CONSISTS OF THE FOLLOWING COMPONENTS:

Mist Marvis AI

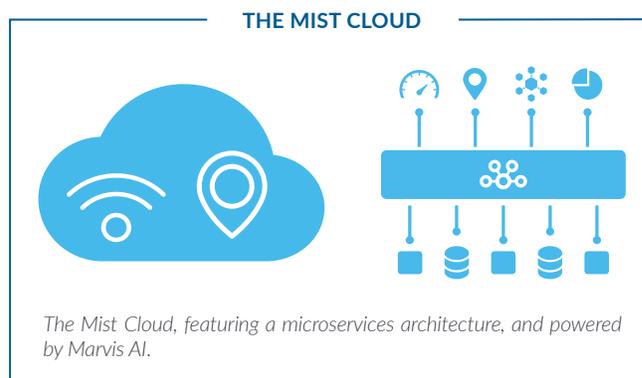
Patent-pending machine learning algorithms adapt in real-time to optimize the wireless user experience. In addition, Marvis uses AI to proactively automate IT operations, provide real-time alerts, and predict problems before they arise.

Mist Cloud

All wireless deployment, setup, operations, and insight are handled via the 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.

Mist Access Points

The AP21, AP41, and AP61 (detailed here), are high performance, enterprise-grade Access Points for 802.11ac Wave 2 Gigabit Wi-Fi and Bluetooth Low Energy. The Mist BT11 is an enterprise-grade Access Point, exclusively for Bluetooth Low Energy. To view other datasheets, go to www.mist.com/resources/datasheets/.



	AP61	AP43	AP41	AP21	BT11
Deployment	Outdoor	Indoor	Indoor	Indoor	Indoor
Wi-Fi Standard	802.11ac Wave2 4x4 : 4	802.11ax (Wi-Fi 6) 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	1 Year	Limited Lifetime	Limited Lifetime	Limited Lifetime	Limited Lifetime

SERVICES AVAILABLE ON THE MIST LEARNING WLAN:

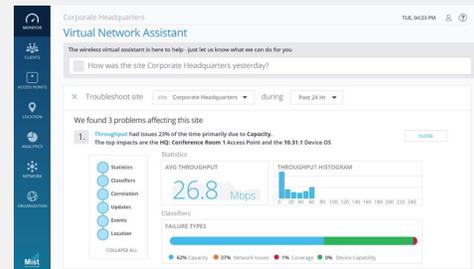
Wi-Fi-Assurance Service

- Predictable & Reliable Wi-Fi
- Proactive Operations
- Minimize Wi-Fi Costs



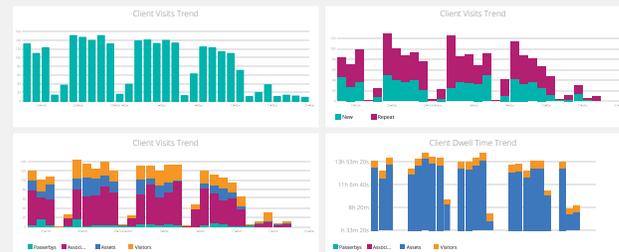
Virtual Network Assistant

- Natural language queries, data mining, and feature ranking
- Simplified Troubleshooting
- Proactive Notifications



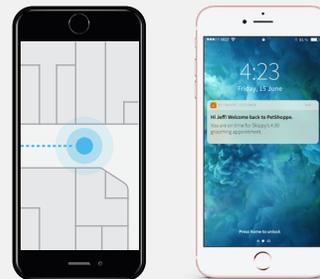
Premium Analytics

- End-to-end Network Visibility
- Orchestrated Networking and Application Performance Queries
- Customer segmentation and reporting based on visitor telemetry
- Customized* dwell and 3rd party reporting for traffic and trend analysis



BLE Engagement Service

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



BLE Asset Visibility Service

Immediately locate high value resources and analyze traffic patterns.



*Mist Premium Analytics service subscription is needed

AP61 FEATURES

High Performance Outdoor Wi-Fi Access

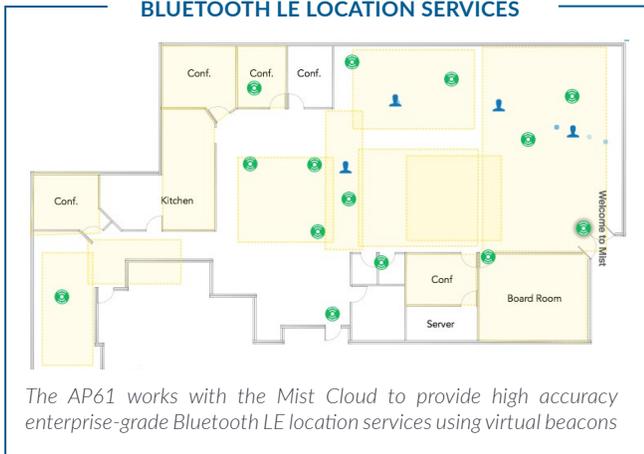
The AP61 delivers high performance wireless access with three 802.11ac Wave 2 radios that deliver up to 1,730 Mbps in the 5GHz band and up to 800 Mbps in the 2.4Ghz band.

Whether you want to extend your user's experience outside the four walls, or you want to set up pervasive outdoor wireless with mesh backhaul, the AP61 delivers the best performance with the simplest operations in an industrial-grade form factor.

High Accuracy Indoor Location

The AP61 has a 16-element Virtual Bluetooth LE (vBLE) antenna array controlled from the Mist Cloud. Passive antennas enhance the power of a single transmitter and produce directional beams to accurately detect distance and location with 1 to 3 meter accuracy. With Mist's patented vBLE technology, you can deploy an unlimited amount of virtual beacons in your physical environment without requiring battery powered BLE beacons.

BLUETOOTH LE LOCATION SERVICES



The AP61 works with the Mist Cloud to provide high accuracy enterprise-grade Bluetooth LE location services using virtual beacons

Unprecedented Insight and Action

A dedicated dual band radio collects data for Mist's patent-pending Proactive Analytics and Correlation Engine (PACE), which leverages machine learning to analyze user experience, correlate problems and automatically detect the root cause of problems. These metrics are used to monitor service level expectations and provide proactive recommendations to ensure problems don't occur (or are fixed as quickly as possible when they do).

Premium Analytics

Mist's Wireless Assurance, User Engagement and Asset Visibility service includes a base analytics capability for analyzing up to 30 days of data which enables you to simplify the process of extracting network insights from data and analytics across your enterprise. To extend these capabilities for more dynamic insights like motion paths* and other 3rd Party* data, along with the option to generate customized reports, the Mist Premium Analytics service is available as an additional subscription.

Client Events	47 Total	31 Good	7 Neutral	9 Bad
Association	Scanner 2	12:25:50.827 AM, Jun 30		
Fast BSS Assoc Failure	Scanner 2	12:25:48.458 AM, Jun 30	Reason	Falling DHCP DISCOVER from 5d5d:25:10:10:d2 on wlan 1 with tid 1234567728: No DHCP Request seen from client in response to the Offer from the Server
IP Assigned	Scanner 2	12:25:47.320 AM, Jun 30	Server IP Address	10.1.1.1
DNS OK	Scanner 2	12:25:45.523 AM, Jun 30	BSSID	5d5d:25:10:10:d2
Default Gateway ARP Success	Scanner 2	12:25:42.817 AM, Jun 30	SSID	Network 1
DHCP Stuck - Bind Failure	Scanner 2	12:25:39.547 AM, Jun 30	Subnet	10.1.1.1/16
Authorization	Scanner 2	12:25:39.257 AM, Jun 30	Transaction ID	922349945
DNS OK	Scanner 2	12:25:38.100 AM, Jun 30	RSSI	-53
Fast Roaming 802.11R	Scanner 2	12:25:37.098 AM, Jun 30	VLAN	1
Reassociation	Scanner 2	12:25:36.098 AM, Jun 30	Failure Count	1



Dynamic Packet Capture

The Mist platform automatically captures packets and streams them to the cloud when major issues are detected. This saves IT time and effort and eliminates the need for truck rolls with sniffers.

Effortless, Cloud-based Setup and Updates

The AP61 automatically connects to the Mist Cloud, downloads its configuration, and joins the appropriate network. Firmware updates are retrieved and installed automatically, ensuring that the network is always up to date with new features, bug fixes, and security updates.

Dynamic Debugging

Constantly monitor services running on the AP61 and send alerts whenever a service behaves abnormally. Dynamic debugging relieves IT of having to worry about an AP going offline or any services running on becoming unavailable.

Automatic RF Optimization

The AP61's dual-band scanning mode continuously scans the airspace for threats and interference. This ensures optimal performance under what could otherwise be challenging RF conditions. The AP61's dual-band sensor continuously scans the airspace for threats and interference.

PREMIUM ANALYTICS

The AP61 collects data for the Mist Cloud to enforce Service Level Expectations (SLE) and premium services.

*Mist Premium Analytics service subscription is needed

SPECIFICATIONS	AP61
Gigabit Wi-Fi	Wave 2
Combined Highest Supported Data Rates	2.5 Gbps
2.4Ghz	4x4:4 802.11b/g/n/ac up to 800 Mbps data rate. 802.11ac for VHT capable Proprietary clients..
5Ghz	4x4:4 802.11a/n/ac Wave 2 up to 1,733 Mbps data rate.
MIMO	MU-MIMO (Multi-user) S U-MIMO (Single-user)
Dedicated Third Radio	2.4 GHz & 5 GHz dual-band WIDS/WIPS, spectrum analysis & location analytics radio
Antenna Options	Internal and External
Bluetooth®	16 directional antenna + 1 omni antenna
Beam Forming	Transmit Beamforming and Maximal Ratio Combining
Power Options	802.3at PoE
Dimensions	310mm x 310mm x 107mm (12.2in x 12.2in x 4.3in)
Weight	Internal Antenna - 4.309 kg (9.5 lbs) External Antenna - 4.535 kg (10 lbs)
Operating Temperature	-20° to 65° C; no solar loading -20° to 55° C; with solar loading
Enclosure	IP67 / NEMA 4 compliant
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 1 - 10/100/1000BASE-T auto-sensing RJ-45
Indicators	Multi-color status LED
Compliance Standards	UL 60950-1 CAN/CSAC22.2 No. 60950-1 FCC Part 15.247, 15.407, 15.107, and 15.109 RSS247 ICES003 (Canada)

I/O PORTS & ACCESSORIES	
Reset	Reset to the factory default settings
Eth1	10/100/1000 BaseT RJ45 interface
Eth0+PoE	10/100/1000 BaseT RJ45 interface that supports 802.3at PoE
Brackets	Vertical, Tilt and Horizontal mounting kit included
Kensington Lock	No

ORDERING INFORMATION	
US/FCC Domain	AP61-US (Internal Antenna) AP61E-US (External Antenna)
Rest of the World	AP61-WW (Internal Antenna) AP61E-WW (External Antenna)

MIST AP61 ACCESS POINT



MIST OMNI-DIRECTIONAL BLUETOOTH ANTENNA ARRAY

