



HotPoint 5000® Wireless Access Point

Firetide HotPoint wireless access points deliver a modular access solution for large scale, indoor and outdoor wireless mesh networks. Modular design enables full network and software integration of the access points with a Firetide wireless mesh network while at the same time permitting independent physical placement of the hardware to provide optimal accessibility for Wi-Fi clients.

Seamless Outdoor and Indoor Operation

Outdoor HotPoint 5200 access points have rugged NEMA 4X/IP67-rated cast aluminum enclosures and have one weatherproof connector for attaching to a Firetide wireless mesh node or a conventional Ethernet port. These units support high gain antennas and can receive power directly from a connected mesh node eliminating the need for an external power supply.

Indoor HotPoint 5100 access points provide wireless access within buildings and moving vehicles. Each indoor access point

has a UL2043 plenum-rated enclosure and an RJ-45 connector for attaching to a Firetide wireless mesh node or a conventional Ethernet port.

Dual Radio Support

HotPoint 5000 series features two independently operating radios. Radio 1 is capable of operating in 802.11 b/g/n mode and Radio 2 is capable of operating in 802.11 a/n. In addition, the radio 2 also support client connectivity in the 4.9 GHz based public safety band. The radios can operate in channel widths of 5, 10, 20 and 40 MHz (MIMO only), with 5 and 10 MHz channel widths only available on the 4.9 GHz band. Alternatively, an Administrator could also decide to put one of the radios into a dedicated monitor mode which enables faster Rogue AP detection, mitigation, abuse prevention and faster adaption to RF environment changes.

Access On or Off the Mesh

HotPoint wireless access points can be mounted to a Firetide mesh node to provide

Wi-Fi access to any indoor or outdoor location without the need for backhaul cabling. HotPoint access points can also connect directly to a conventional wired infrastructure eliminating the need to install a mesh node in locations where wired connectivity is readily available.

Modularity for Flexible Placement

Unlike conventional mesh networks that combine mesh backhaul and Wi-Fi access in the same enclosure, Firetide mesh nodes and access points can be physically separated allowing system integrators to optimize RF separately for both the mesh backhaul as well as client access.

For example, in a multi-building mesh network, mesh nodes should be placed in areas that enable the best connectivity between buildings which is typically at higher locations. However the best locations for the access points tend to be lower to provide the best connectivity for Wi-Fi clients inside a building. Because the access points and mesh nodes are kept in separate enclosures, they can be independently positioned for optimal RF connectivity.

Single-point Network Management for Mesh and Access

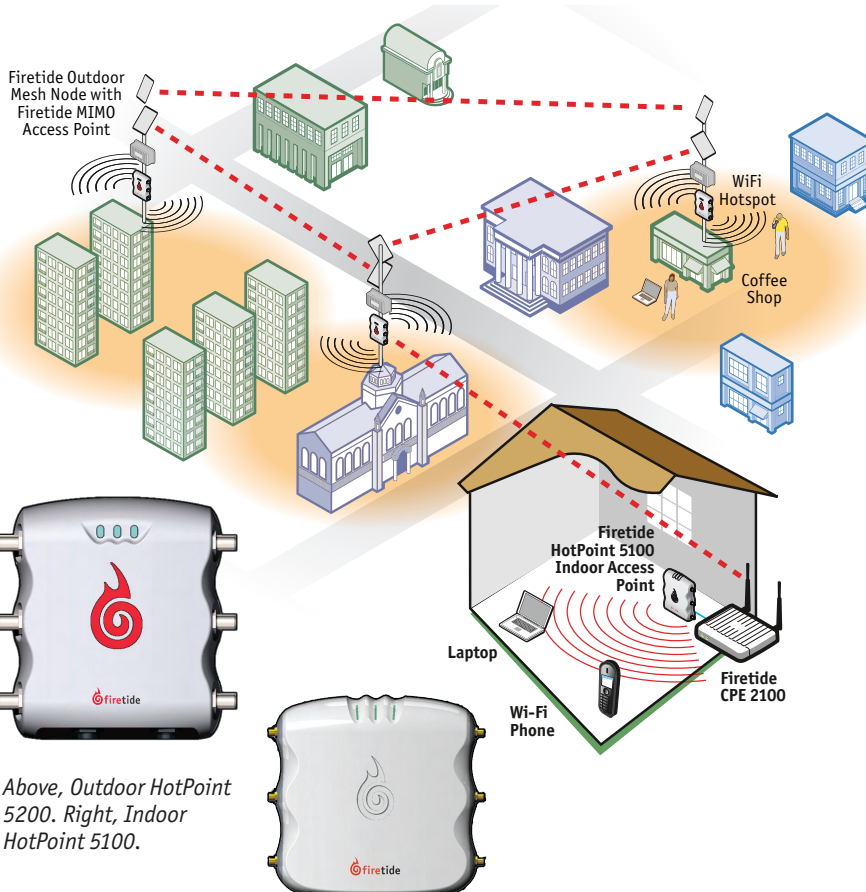
Whether connected directly to a Firetide wireless mesh network or to a wired infrastructure, the HotPoint access points are fully integrated and managed with the same HotView software used to manage Firetide mesh nodes. HotView provides remote management from a centralized location and users can manage all mesh and access traffic from a single console.

Advanced Security and Performance Features

HotPoint access points operate in the 2.4 GHz band and feature WPA2 and WEP encryption, up to 16 SSIDs, industry compliant QoS, and durable enclosures

Designed for Hot Spots

Layered service levels can be enabled through Virtual APs (VAPs) and Virtual AP Groups. Each HotPoint AP supports up to 16 VAPs with support for a total of 128 clients, creating different logical networks with varying levels of security, access, and performance. Additional Hot Spot features include user-based rate limiting and intracell blocking.



Above, Outdoor HotPoint 5200. Right, Indoor HotPoint 5100.

HotPoint 5000® Wireless Access Point

Specifications

Models

- HotPoint 5100 Indoor Tri-band Dual Radio Access Point
- HotPoint 5200 Outdoor Tri-band Dual Radio Access Point

Wireless Interface

- IEEE 802.11 b/g/n on Radio 1
- IEEE 802.11 a/n on Radio 2
 - 3 X 3 MIMO (3 antennas and 2 streams)
- Frequency ranges
 - 2.412 – 2.483 GHz
 - 4.94 – 4.99 GHz
 - 5.15 – 5.25 GHz (Indoor use only)
 - 5.25 – 5.35 GHz
 - 5.470 – 5.725 GHz
 - 5.725 – 5.825 GHz
- Transmit power up to 100 mW
- Auto Transmit Power Control
- 802.11d (Auto Channel Select)
- Receive sensitivity (typical)
 - 2.4 GHz, 20 Mhz bandwidth
 - 1 Mbps: -95 dBm
 - 6 Mbps: -96 dBm
 - 11 Mbps: -92 dBm
 - 54 Mbps: -73 dBm
 - HT20 MCS0: -96 dBm
 - HT20 MCS7: -96 dBm
 - 5 GHz, 20 Mhz bandwidth
 - 1 Mbps: -95 dBm
 - 6 Mbps: -94 dBm
 - 11 Mbps: -92 dBm
 - 54 Mbps: -82 dBm
 - HT20 MCS0: -94 dBm
 - HT20 MCS7: -77 dBm
 - 5 GHz, 40 Mhz bandwidth

5 Ghz	2.4 Ghz
HT40 MCS0 -90	-91
HT40 MCS7 -74	-76
- Media Access Protocol: CSMA/CA with ACK
- Automatic channel assignment

Networking

- Up to 16 SSIDs per HotPoint*
- Up to 16 independent VLANs*
- DHCP client and server, separate DHCP range per SSID
- WDS (Wireless Distribution System)*

Security, Authentication and Encryption

- 802.11i, WPA2
- 40 bit, 104 bit WEP keys
- 802.1x, RADIUS authentication
- VPN tunneling and filtering
- SSID suppression
- Firewall
- MAC access control
- NAT
- Rogue AP detection/mitigation

* Standalone mode
† Controller mode

Management and Configuration

- Integrated mesh and access management
- Multiple user interface options:
 - Centralized management via HotView Pro
 - Built-in web-based management
 - Command line interface (CLI)
- Remote firmware upgrade
- Auto AP discovery†
- Physical AP grouping

Hot Spot Services

- Virtual AP Grouping
- User-based rate limiting
- Inter-cell/intra-cell blocking
- Captive portal management
- Client-based policy management

Client Access Features

- Up to 128 concurrent users simultaneously per HotPoint
- L2 Fast Roam and L3 seamless mobility with controller
- Fast handoff enabled
- 802.11e (WMM) (Quality of Service)
- Auto configuration and image download

Network Ports

- One 10/100/1000 autosense Base-T port
- IEEE 802.3, 802.3u based PoE

Management Software

- HotView Pro™ mesh management software (Separate purchase required)

Regulatory Agency Certifications

- RoHS, FCC Part 15, CE, IC, WEEE compliant
- Safety

Warranty

- Hardware: one year limited warranty (Extended warranty available for purchase)
- Software: 90 days limited warranty

Outdoor Model

Enclosure

- Cast aluminum NEMA 4X/IP67 enclosure
- Six Type-N antenna connectors
- One weatherproof power connector
- One weatherproof Ethernet connector
- System indicator LEDs (Power, Radio 1 and Radio 2)
- Weight: 3.75 lbs (1.7 kg)
- Dimensions: 8.6" L X 8.2" W X 2.0" H

Power

- Input power: 48 V / 0.40 A powered via 802.3at PoE PSE
- External DC Input: 15 V / 1.3 A
- External power supply: 100–240 VAC, 50/60 Hz
- Power consumption: 11.925 W (Typical), 18.925 W (Max)

Environmental Specifications

- Operating temperature: -20 °C to +55 °C (-4 °F to +131 °F)
- Storage temperature: -40 °C to +70 °C (-40 °F to +158 °F)
- Humidity (non-condensing): 10% to 90%
- Storage humidity (non-condensing): 10% to 90%
- Max altitude: 15,000 ft (4572 m)

Included Accessories

- Antennas: three pairs of 2.4 Ghz, 5 dBi, omnidirectional for staging
- Mounting bracket kit for pole and wall mounting
- PoE Injector

Optional Accessories

- Antennas: External 2.4 Ghz, 8 dBi Omnidirectional Integrated MIMO antenna
- Cable Assemblies: 1.5 m or 5 m length LMR400 cable with low loss lightning suppressor

Indoor Model

Enclosure

- UL2043 Plenum-rated
- Antenna connector: SMA reverse polarity female (quantity 6)
- Power connector (2.1 mm, center positive)
- Ethernet data connector (RJ-45)
- Reset button (recessed)
- Security slot for physical locking device
- System indicator LEDs (power, uplink, status, access)
- Weight: 14 oz (0.4 kg)
- Dimensions: 7.3" L X 6.8" W X 1.4" H

Power

- Input voltage: 48 VDC/0.3 A via external power supply or via 802.3af PoE PSE
- External power supply: 100–240 VAC, 50/60 Hz
- Power consumption: 11.925 W Typical

Environmental Specifications

- Operating temperature: 0 °C to +50 °C (32 °F to +122 °F)
- Storage temperature: -20 °C to +70 °C (-4 °F to +158 °F)
- Humidity (non-condensing): 10% to 90%
- Storage humidity (non-condensing): 10% to 90%
- Max altitude: 5,000 ft (4572 m)

Included Accessories

- DC power adapter with North American AC power cable
- Antennas: Three pairs, 2.4 GHz, 5 dBi, omnidirectional for staging
- Connectors: SMA, reverse polarity
- DC power brick

Optional Accessories

- Mounting kit for secure wall, ceiling, tabletop, or cubicle installation
- PoE Power Injector

Other Firetide Products



Mesh Nodes
HotPort Indoor & Outdoor Mesh Nodes



Access Points
HotPoint Indoor & Outdoor Access Points



CPE
HotClient Indoor Customer Premises Equipment



Software
HotView Pro Mesh Management Software



Accessories
Antennas, Mounting Kits, Cables, etc.



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