HotPoint 5000 Wireless Access Point

Outdoor HotPoint 5200   Indoor HotPoint 5100

HotPoint 5000 Wireless Access Point – A modular access solution for large scale, indoor and outdoor wireless mesh networks; full network integration while permitting independent physical placement provides optimal accessibility for Wi-Fi clients.

Seamless Outdoor and Indoor Operation

Outdoor HotPoint 5200 access points have rugged NEMA 4X/IP66-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, Radio 2 also supports 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.

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.

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.
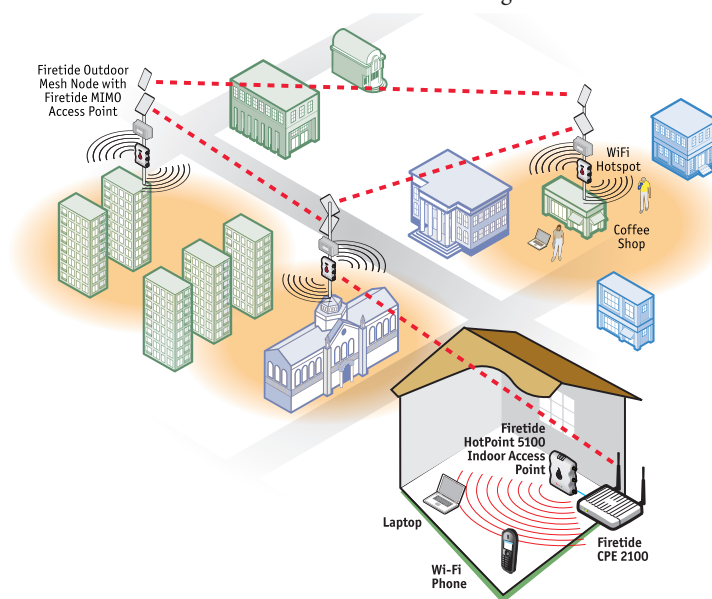
Specifications

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 (Varies per Country)
  - 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)

802.11b
	1 Mbps:	-95 dBm
	5.5 Mbps:	-92 dBm
	11 Mbps:	-91 dBm

802.11g
	6 Mbps:	-95 dBm
	12 Mbps:	-95 dBm
	54 Mbps:	-78 dBm

802.11ng		HT20	HT40
15 Mbps	(MCS0)	-94	-88
150 Mbps	(MCS7)	-77	-73
300 Mbps	(MCS15)	-75	-71

802.11a
	6 Mbps:	-93 dBm
	12 Mbps:	-93 dBm
	54 Mbps:	-80 dBm

802.11na		HT20	HT40
15 Mbps	(MCS0)	-93	-89
150 Mbps	(MCS7)	-75	-73
300 Mbps	(MCS15)	-73	-69

- 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
- SSID suppression
- MAC access control
- NAT

Management and Configuration
- Integrated mesh and access management
- Centralized management via HotView Pro
- Built-in web-based management
- Remote firmware upgrade
- Physical AP grouping

Hot Spot Services
- Virtual AP Grouping
- User-based rate limiting
- Intercell/intracell blocking
- Captive portal management
- Client-based policy management

Client Access Features
- Up to 128 concurrent users simultaneously per HotPoint
- 802.11e (WMM) (Quality of Service)

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
- Safety: MET Mark; IEC/EN60950-1
- FCC Part 15, CE, Industry Canada
- RoHS / CMM / WEEE

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

Outdoor Model

Enclosure
- Cast aluminum NEMA 4X/IP66 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
- DC Input: 15 VDC ± 10%
- Power Consumption: 30 W (Max)
- Port 1: IEEE 802.3at compliant PoE-PD

Environmental Specifications
- Operating temperature: from -40 ºC to +60 ºC (-40 ºF to +140 ºF)
- Storage temperature: -40 ºC to +70 ºC (-40 ºF to +158 ºF)
- Humidity (non-condensing): 10% to 90%
- Storage humidity (non-condensing): 10% to 90%
- Max altitude: 15,000 ft (4,572 m)

Included Accessories
- Antennas: A pair of dual-band 2.4 GHz/ 5 GHz, 3 dBi omnidirectional for staging
- Mounting bracket kit for pole and wall mounting
- PoE Injector
- Connectors: SMA, reverse polarity

Optional Accessories
- Antennas: External 2.4 GHz, 8 dBi Omnidirectional 3x3 MIMO antenna (AO-024-MIMO-8)
- 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/0.83 A via external power supply or via 802.3af PoE PSE
- External power supply: 100–240 VAC, 50/60 Hz
- Power consumption: 16 W (Max)

Environmental Specifications
- Operating temperature: 0 ºC to +50 ºC (32 ºF to +122 ºF)
- Storage temperature: -20 ºC to +70 ºC (-4 ºF to +158 ºF)
- Humidity (non-condensing): 10% to 90%
- Storage humidity (non-condensing): 10% to 90%
- Max altitude: 15,000 ft (4572 m)

Included Accessories
- DC power adapter with North American AC power cable
- Antennas: Three pairs, 2.4 GHz, 5 GHz, 3 dBi, omnidirectional for staging
- DC power brick

Optional Accessories
- PoE Power Injector
- Antennas (See Antenna & Accessory Guide for options)

Firetide Products

Mesh Nodes
HotPort Indoor, Outdoor and Edge Mesh Nodes

Access Points
HotPoint Indoor & Outdoor Access Points

Mobility
Firetide Mobility Controller

Software HotView Pro Mesh Management Software

Accessories
Antennas, Mounting Kits, Cables, etc.

Data Sheet