



HotPoint® 4000 Wireless Access Points

HotPoint® Wireless Access Points

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 4600 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



HotPoint 4501 Indoor Access Point



HotPoint 4601 Outdoor Access Point

can receive power directly from a connected mesh node eliminating the need for an external power supply.

Indoor HotPoint 4500 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.

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. Because the access points and mesh nodes are kept in separate enclosures, they can be independently positioned for optimal RF connectivity.

Tri-band Access

HotPoint access points support user-selectable licensed and unlicensed spectra — 2.4, 4.9, and 5 GHz. Wi-Fi access allows mobile users to tap into video surveillance or data networks to monitor live video feeds or file

reports from the field. Tri-band access augments the tri-band functionality of Firetide HotPort mesh nodes, delivering unprecedented flexibility and control for public safety, municipal, enterprise, and security applications.

Single-point Network Management for Mesh and Access

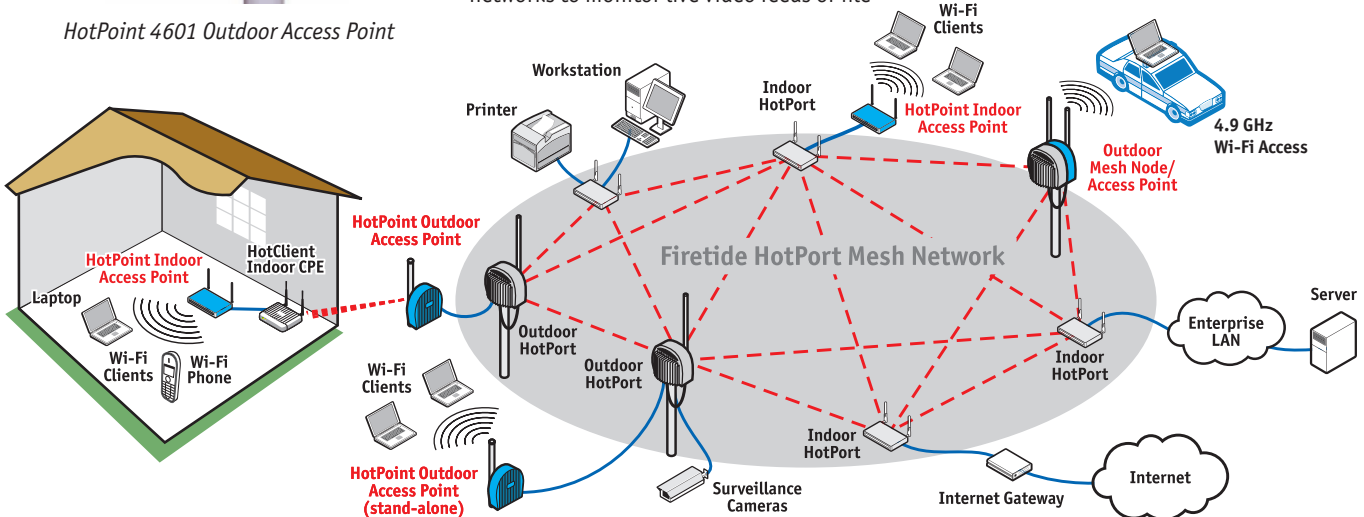
Whether connected directly to a Firetide wireless mesh network or to a wired infrastructure, the HotPoint access points are fully integrated and managed with the same HotView™ software used to manage Firetide mesh nodes. HotView provides remote management from a centralized location and users can manage 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. High-power radios with up to 400 mW provide extended reach and outstanding penetration.

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, creating different logical networks with varying levels of security, access, and performance. Additional Hot Spot features include user-based rate limiting, intercell/intracell blocking, captive portal management, walled garden, and client-based policy management.



HotPoint® 4000 Wireless Access Points

Specifications

Models

- HotPoint 4501 Indoor Tri-band Access Point
- HotPoint 4601 Outdoor Tri-band Access Point
- 4000-2000 Accessory Kit Bundle for Stand-alone HotPoint 4601

Wireless Interface

- IEEE 802.11a/b/g
- Frequency ranges
 - 2.412 – 2.483 GHz
 - 4.94 – 4.99 GHz (US public safety band)
 - 5.15 – 5.25 GHz
 - 5.25 – 5.35 GHz
 - 5.470 – 5.725 GHz
 - 5.725 – 5.825 GHz
- Transmit power up to 400 mW
- Manual Transmit Power Control
- 802.11d (Auto Channel Select)
- Receive sensitivity (typical)
 - 2.4 GHz, DSSS
 - 1 Mbps: -95 dBm
 - 11 Mbps: -88 dBm
 - 2.4 GHz, OFDM
 - 6 Mbps: -90 dBm
 - 54 Mbps: -73 dBm
 - 5 GHz
 - 6 Mbps: -90 dBm
 - 54 Mbps: -73 dBm
- Media Access Protocol: CSMA/CA with ACK
- Range up to 1000 meters depending on client configuration and environment
- 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
- 128 bit, 256 bit AES keys
- 802.1x, RADIUS authentication
- VPN tunneling and filtering
- SSID suppression
- Firewall
- MAC access control
- NAT
- Rogue AP detection

Management and Configuration

- Integrated mesh and access management
- Multiple user interface options:
 - Centralized management via HotView or 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
- Intercell/intracell blocking
- Captive portal management
- Walled garden
- Client-based policy management

Client Access Features

- Up to 64 concurrent users simultaneously per HotPoint
- Inter Access Point Protocol (IAPP) enabled per 802.11f
- Fast handoff enabled
- 108 Mbps Turbo Mode
- 802.11e (WMM) (Quality of Service)
- Zero user configuration

Network Ports

- One 10/100 autosense Base-T port
- IEEE 802.3, 802.3u compliant

HotPoint Management Software

- HotView™ management software (bundled)
- HotView Pro™ mesh management software (optional)

Regulatory Agency Certifications

- FCC Part 15
- CE

Warranty

- Hardware: one year limited warranty
- Software: 90 days limited warranty

Outdoor Model

Enclosure

- Cast aluminum NEMA 4X/IP67 enclosure
- Two N-type antenna connectors
- One weatherproof power connector
- One weatherproof Ethernet connector
- System indicator LEDs (power, status, access)
- Weight: 4.8 lbs (2.2 Kg) without external power supply
- Dimensions: 11.00 in x 8.50 in x 2.00 in (27.9 cm x 21.6 cm x 5.1 cm)

Power

- Input voltage: 12-18 VDC via external power supply (16 VDC nominal) or PD/POE capable on Ethernet data connector
- External power supply: 100-240 VAC, 50/60 Hz (not included)
- Power consumption: 9-11 W, depending on configuration

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%

Included Accessories

- Antennas: one pair, 2.4 GHz, 5 dBi, omni directional
- Mounting bracket kit for pole and wall mounting
- One weatherproof, PoE-compatible, Ethernet cable

Optional Accessories

- Antennas: 2.4 GHz, 7.5 dBi or 8.0 dBi, omni directional
- Cable Assemblies: 1.5 m or 5 m length LMR400 cable with low loss lightning suppressor
- Stand alone accessory kit bundle with power supply adapter

Indoor Model

Enclosure

- UL2043 Plenum-rated
- Antenna connector: SMA reverse polarity female (quantity 2)
- 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: 2.2 lbs (1.0 Kg) without external power supply
- Dimensions: 9.00 in x 5.84 in x 1.10 in (22.9 cm x 14.8 cm x 2.8 cm)

Power

- Input voltage: 5 VDC via external power supply
- External power supply: 100-240 VAC, 50/60 Hz
- Power consumption: 8-10 W, depending on configuration

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%

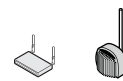
Included Accessories

- AC power adapter with North American AC power cable
- Antennas: one pair, 2.4 GHz, 5 dBi, omni directional
 - Connectors: SMA, reverse polarity
 - Length: 6.25 in (15.5 cm)

Optional Accessories

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

Other Firetide Products



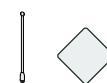
Mesh Nodes
HotPort Indoor & Outdoor Mesh Nodes



CPE
HotClient Indoor & Outdoor Customer Premises Equipment



Software
HotView & HotView Pro Mesh Management Software, HotView Controller Mobility Software



Accessories
Antennas, Mounting Kits, Cables, etc.



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