



# HotClient™ 2000 Customer Premises Equipment

## HotClient™ Customer Premises Equipment

The Firetide HotClient 2000 customer premises equipment (CPE) provides a secure and reliable solution for extending the reach of outdoor wireless mesh networks to indoors. It enables operators deploying municipal and enterprise wireless networks to maintain optimal user experience and connectivity anywhere. Featuring a high-power 400 mW radio, the HotClient CPE connects to outdoor access points to provide redundancy of coverage and excellent signal availability.

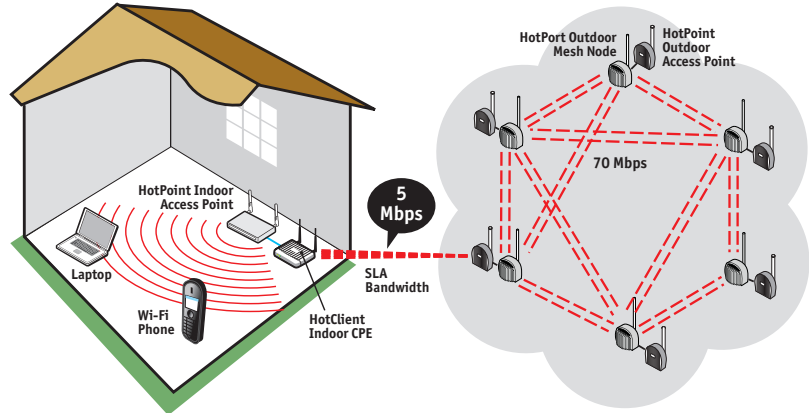
## Firetide Wireless Mesh Infrastructure

The HotClient 2000 CPE is a key component of the Firetide multi-service network infrastructure that securely supports concurrent transmission of real-time video, voice, and data.

The self-forming and self-healing properties of Firetide HotPort® mesh nodes enable rapid network deployment and dependable operation. The patented Firetide AutoMesh™ routing protocol manages network load and traffic congestion to optimize network-wide performance and capacity.

Firetide HotPoint® access points and HotClient CPE devices extend the intelligence of the mesh to the edge of the network, enabling large-scale wireless access deployments with intelligent response to interference and effective management of multiple users accessing the network simultaneously.

The Firetide network management platform, HotView Pro™, provides end-to-end network visibility and control for the entire Firetide mesh and access infrastructure,



including HotPort mesh nodes, HotPoint access points, and HotClient CPEs.

Additionally, Firetide offers the HotView Controller mobility platform to provide seamless client and infrastructure mobility.

## Indoor and Outdoor Flexibility

To provide optimal flexibility, HotClient is offered in both indoor and outdoor versions.

The indoor HotClient 2100 CPE is essential for large-scale municipal deployments requiring reliable access to penetrate through thick walls. The CPE is housed in a plastic enclosure for wall or desktop mounting.

The ruggedized outdoor HotClient 2200 CPE can be placed on rooftops, in atria, and in outdoor hallways, making it ideal for office buildings and multi-dwelling units. The outdoor CPE is Power over Ethernet-enabled for extra versatility.

## Bridging High- and Low-Power Wireless Devices

Because consumer wireless devices such as laptops and Wi-Fi® phones are typically low-power devices, an equalizer is required in the connection between the high-power outdoor wireless network and the indoor devices. The HotClient CPE serves as that equalizing bridge to ensure the best end-user experience possible.

## Tri-Band Access

HotClient CPE support user-selectable licensed and unlicensed spectra—2.4, 4.9, and 5 GHz. Tri-band access augments the tri-band functionality of Firetide HotPort mesh nodes and HotPoint access points delivering unprecedented flexibility and control for public safety, municipal, enterprise, and security applications.

## Unique Access Features

With HotClient CPE, Firetide has extended the management intelligence to the edge of the network, allowing service providers to monitor and report compliance to service level agreements on a per user basis.

Firetide access products—HotPoint access points and HotClient CPEs—support a fairness algorithm with traffic shaping ability to enable effective management of multiple users accessing the network at the same time. This technology ensures that a single user will not monopolize shared access.

The HotClient CPE also allows service providers to offer dedicated or shared service at contractual upload/download speeds.

## RADIUS Server Authentication

Remote Authentication Dial In User Service (RADIUS) is an AAA (authentication, authorization, and accounting) protocol for access applications and mobility. The RADIUS server, integrated with HotView Pro, automatically downloads the configuration onto the HotClient CPE after the device has been authenticated, eliminating the need for end users to configure the CPE manually.

## Privacy and Security

Secure, private communications are critical to residential and enterprise customers alike. The HotClient CPE supports the industry's highest level of security to ensure privacy for communications and reduces liability for service providers. Like all components of the Firetide mesh and access wireless infrastructure, the HotClient CPE offers WPA2 (Wi-Fi Protected Access) encryption for an unmatched, solid, and trusted network.

HotClient 2100  
Indoor CPE



HotClient 2200  
Outdoor CPE



# HotClient™ 2000 Customer Premises Equipment

## Specifications

### Models

- HotClient 2100 Indoor CPE
- HotClient 2200 Outdoor CPE

### 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
  - 5.725 – 5.825 GHz
- Transmit power up to 400 mW
- Manual Transmit Power Control
- Typical RX sensitivity:
  - 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

### Networking

- DHCP client and server

### Security, Authentication and Encryption

- 802.11i, WPA2
- 40 bit, 104 bit WEP keys
- 128 bit, 256 bit AES keys
- 802.1x, RADIUS authentication
- Support SSID suppression
- MAC access control
- NAT
- Supports VLANs
- Digital certificates on nodes

### Management and Configuration

- Multiple user interface options:
  - Centralized management via HotView or HotView Pro
  - Built-in web-based management
  - Command line interface (CLI)
  - Remote firmware upgrade
  - Simple Network Management Protocol (SNMP)

### Access Services

- Configure and enforce Service Level Agreements (SLA)
- RADIUS server management
- Redundant AP connectivity



Outdoor HotClient 2200 connectors

### Network Ports

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

### HotClient Management Software

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

### Regulatory Agency Certifications

- FCC Part 15
- CE

### Warranty

- Hardware: one year limited warranty, one year optional warranty extension available
- Software: 90 days limited warranty

### Outdoor Model

#### Enclosure

- Cast aluminum NEMA-4/IP66 enclosure
- One built-in antenna, one N-type antenna connector for optional antenna
- One Ethernet port with weatherized watertight RJ-45 coupling
- System indicator LEDs (power, status, align)
- Weight: 2 lbs (0.9 Kg) without bracket
- Dimensions: 7.8" X 8.3" X 2.4" (198 X 210 X 60 mm)

#### Power

- Unit power is via 802.3af Power-over-Ethernet
- PoE PSE module: AC Input 90-240 VAC, 50-60 Hz, 0.15 A
- Unit power dissipation <9W

#### Environmental Specifications

- Operating temperature: -40°C to +60°C
- Storage temperature: -40°C to +70°C
- Humidity (non-condensing): 10% to 90%
- Storage humidity (non-condensing): 5% to 95%
- Maximum altitude 15,000 feet (4572 meters)

#### Included Accessories

- Power-feed unit (AC power to PoE)
- Bracket for pole mounting

#### Optional Accessories

- Bracket for wall mounting
- Single detachable, high gain, spectrum-specific, omni directional or directional antenna (see Antenna Guide)



Indoor HotClient 2100 connectors

### Indoor Model

#### Enclosure

- Plastic enclosure
- Two RP-SMA antenna connectors
- One DC power connector
- One Ethernet connector
- System indicator LEDs (power, status)
- Weight: 10 oz (280 g)
- Dimensions: 6" X 4.75" x 1" (150 X 120 X 25 mm)

#### Power

- DC Input: 9-15 VDC 0.7 A at 12 VDC
- AC power adapter: 100-240 VAC, 50/60 Hz input; 12 VDC, 1.5 A rated output

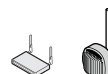
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- Operating temperature: 0°C to +60°C
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- Humidity (non-condensing): 10% to 90%
- Storage humidity (non-condensing): 5% to 95%
- Maximum altitude 15,000 feet (4572 meters)

#### Included Accessories

- AC power adapter with interchangeable plug inserts (US, Europe, UK, Australia)
- Antennas: one pair of 5 dBi, 2.4 GHz omni directional antennas

### Other Firetide Products



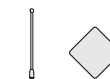
**Mesh Nodes**  
HotPort Indoor & Outdoor Mesh Nodes



**Access Points**  
HotPoint Indoor & Outdoor Access Points



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



**Accessories**  
Antennas, Mounting Kits, Cables, etc.

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