



HotPort™

High Performance Mesh Network

The HotPort High Performance Mesh Network is the third generation of mesh networking products from Firetide. The HotPort system enables standard network applications and devices to operate on a wireless mesh network and provides instant network connectivity wherever cabling is too difficult, disruptive, or costly to install.

Designed for maximum performance, scalability, and ease of use, the HotPort mesh network provides exceptional value with the lowest cost of any mesh solution. It works seamlessly outdoors and indoors with excellent wireless connectivity and maximum coverage at each location. The included HotView™ software provides complete monitoring and management of the mesh and allows remote access via the Internet.

High Capacity

The high capacity of the HotPort mesh network makes it ideal for high-bandwidth and low latency applications such as real time video and voice networks and large Wi-Fi HotZones. The HotPort system features high performance hardware and software with up to 25 Mbps throughput.

Scalable

Hotport nodes automatically discover each other so expanding the mesh network is simply a matter of powering up more HotPort nodes within radio range of any existing nodes. Multiple HotPort mesh networks can also connect to each other to extend the mesh to even greater distances.

HotPort 3100 Series Mesh Nodes provide Ethernet service to any indoor location over a self-forming wireless mesh backbone. Each node is plenum rated and features a four port 10/100 Mbps Ethernet switch for connecting devices such as access points, high speed video cameras, VoIP telephones, computers, printers, and servers to the mesh backbone. The HotPort 3101 provides up to 10 Mbps throughput making it ideal for indoor Wi-Fi HotZones. The HotPort 3103 provides up to 25 Mbps throughput plus traffic prioritization for high bandwidth, multi-service networks.

Dual Spectrum Operation

HotPort indoor mesh nodes have 54 Mbps radios that can be set to operate at 2.4 GHz for maximum range and penetration or at 5 GHz to avoid interference from 2.4 GHz traffic.

Strong Security

HotPort mesh nodes are highly secure and feature up to 104 bit WEP and up to 256 bit AES key encryption. A packet filtering function also allows network managers to specify which MAC addresses are permitted to operate on the mesh.

Self-Healing

Multiple paths between nodes allow traffic to travel around obstacles and allow the network to heal itself if a node goes down.

Virtual LANs

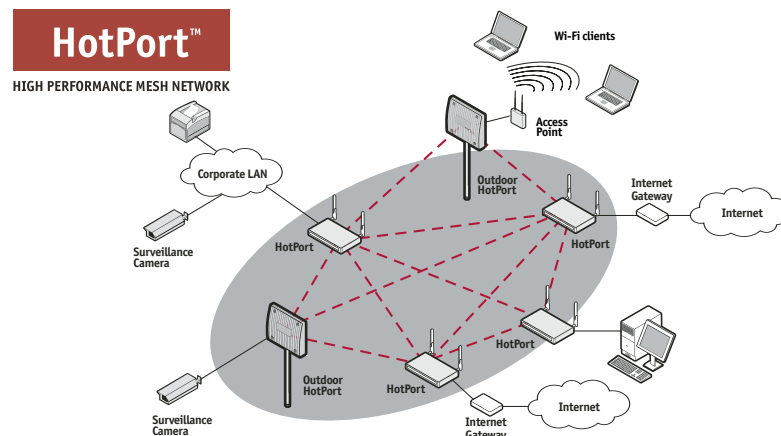
HotPort mesh nodes can enhance privacy and mesh performance by separating traffic and directing it onto specific VLAN routes. The HotPort mesh supports 802.1q VLAN tagging of packets entering and exiting the mesh.

Gateway Interconnects

Multiple interconnects for external networks such as the Internet provide redundancy for added reliability and throughput.

Traffic Prioritization (HotPort 3103 only)

Each node provides up to three Ethernet Class of Service (CoS) levels to ensure that traffic requiring high throughput or continuous service, such as video and voice, take precedence over other forms of traffic.



Specifications



HotPort 3101 Front



HotPort 3103 Front



HotPort 3101/3103 Rear

Model

HotPort 3101
HotPort 3103

Mesh Protocol

Firetide Mesh Routing Protocol (FMRP)

Traffic Prioritization

Class of Service (HotPort 3103 only)

Encryption

- 40 bit, 104 bit WEP keys
- 128 bit, 256 bit AES keys

Wireless interface

2.4 GHz spectrum

- 2.400–2.497 GHz
(actual channels available for use are subject to country-specific regulatory approvals)
- Tx Power: up to 1 W EIRP

5 GHz spectrum

- 5.150–5.250 GHz
- 5.250–5.350 GHz
- 5.725–5.850 GHz
(actual channels available for use are subject to country-specific regulatory approvals)
- Tx Power: up to 1 W EIRP
- Dynamic Frequency Selection (DFS)
- Transmit Power Control (TPC)

Network ports

- Four 10/100 Base-T (RJ-45)
- IEEE 802.3, 802.3u compliant
- CSMA/CD 10/100 autosense

Antennas

- Two detachable, omni directional, vertical polarization antennas
- Spectrum: 2.4 GHz and 5 GHz
- Connectors: SMA reverse polarity
- Length: 6.25 in. (15.5 cm)
- Range: up to 984 feet (300 meters) depending on spectrum selected and environmental attenuation
- Gain: up to 6 dBi

CPU

- Intel IXP425, 266 MHz (HotPort 3101)
- Intel IXP425, 533 MHz (HotPort 3103)

Enclosure

- Two antenna connectors (SMA reverse polarity)
- One power connector
- Four Ethernet data connectors (RJ-45)
- System indicator LEDs (power, status, mesh, fault)
- Ethernet indicator LEDs (link status, activity)
- Security slot for physical locking device
- Reset button (recessed)
- Weight: 2.1 lbs (.95 Kg) without external transformer
- Dimensions: 9" x 6" x 1"
(22.86 cm x 15.2 cm x 2.5 cm)

Power

- Input voltage: 5-12 VDC @ 1.25 A
- External transformer: 100-240 VAC, 50/60 Hz
(transformer voltages may vary depending on country of operation)
- Power consumption: 7-15 W, depending upon configuration

Regulatory agency certifications

- Plenum rated UL2043
- Contact your Firetide dealer for product availability and certifications for your country

Environmental specifications

- Operating temperature: 0° C to +50° C
- Storage temperature: -20° C to +70° C
- Humidity (non-condensing): 10% to 90%
- Storage humidity (non-condensing): 10% to 90%

Accessories

Mounting kit for secure wall, ceiling, tabletop, or cubicle installation (not included)

Mesh Management Software

Includes HotView mesh management software

Warranty

One year limited warranty (see warranty card for details)

Firetide, Inc.
16795 Lark Avenue, Suite 200
Los Gatos, CA 95032

Toll Free: 877-FIRETIDE (877-347-3843)
Phone: 408-399-7771
info@firetide.com



HotPort™

HIGH PERFORMANCE MESH NETWORK



Outdoor mesh nodes



Indoor mesh nodes



HotView™
mesh management
software