HotPort® 5020-M Wireless Infrastructure Node

HotPort 5020 Wireless Infrastructure Node

HotPort 5020 infrastructure brings cost-effective reliable connectivity solutions to Firetide's core wireless infrastructure portfolio.

Reliable, Cost-effective Infrastructure Solution

Operators can now use HotPort 5020 to connect their edge devices onto existing Firetide mesh infrastructure networks in a cost-effective manner. The 5020 infrastructure node provides an optimum balance between cost and performance for data connectivity applications such as ITS, sensor backhaul, Wi-Fi/last mile backhaul, etc. The complete spectrum of the HotPort 5020 infrastructure nodes include:

- HotPort 5020-M: Advanced security, reliability and connectivity with 25 Mbps of usable throughput.

- HotPort 5020-E: Reliable, cost-effective edge connectivity on the boundary of a core Firetide mesh network, delivering real usable throughput of 25 Mbps.

- HotPort 5020-LNK: A rapid deployable, easy-to-use point-to-point solution with 50 Mbps of actual usable throughput.
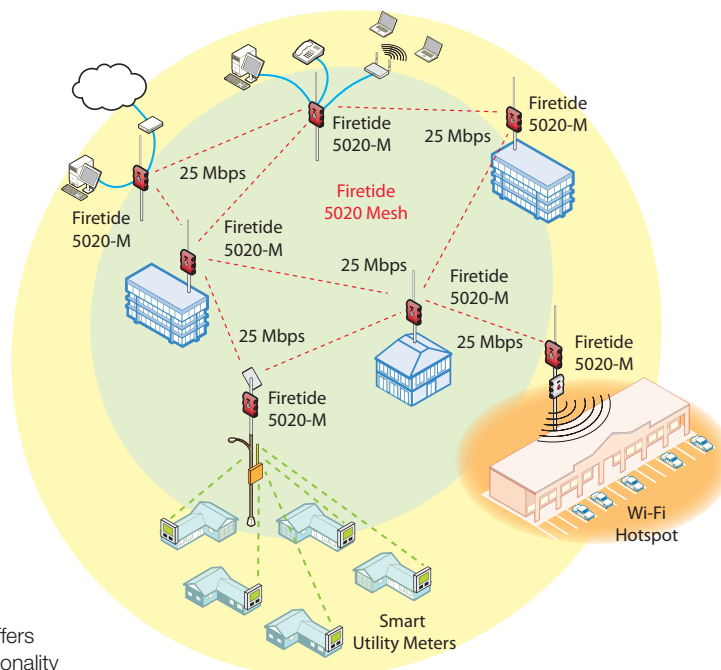
Complete Infrastructure Solution

HotPort 5020-M model is a natural extension of Firetide's core wireless infrastructure technology. Firetide's expertise in large-scale wireless mesh networks for video, data and voice applications in harsh environments ensures that 5020-M nodes are optimized to provide best-in-class performance, security and reliability in a cost-effective solution.

Quality of Service

Firetide's patented AutoMesh™ flow based routing protocol supports advanced load balancing and congestion control mechanisms for optimal routing within the mesh network. The HotPort 5020 infrastructure node also provides extensive VLAN capabilities critical for deploying a multi-service network on a large scale.

Flexible Configuration

All models of HotPort 5020 infrastructure node are software configurable to operate in 2.4, 4.9 and 5 GHz. The PoE powered HotPorts eliminate the need for running both data and power wires to the nodes. HotPort 5020 infrastructure nodes can utilize channel widths of 5, 10, 20 and 40 MHz, with 5 and 10 MHz channel widths only available on the 4.9 GHz band. Dynamic Frequency selection is available for approved list of countries.

HotPort 5020-M offers complete Mesh functionality

Specifications

Models

5020-M
- HotPort 5020 Wireless Infrastructure Node
- Dual radio, 25 Mbps UDP
- DC connector
- Dual band 2.4 GHz / 5 GHz 3 dBi antennas
- RJ-45 weatherized Ethernet connector
- Quick install guide
- HotPort 5020-M can link point-to-point or point-to-multipoint to 5020-E, 5020-M, and 7000 series nodes; it can link in linear and mesh modes with 7000 series and 5020-M nodes

Mesh Protocol
- Firetide AutoMesh Protocol

Wireless Interface
- IEEE 802.11a/b/g/n
- 3X3 MIMO with 2 streams
- Transmit power up to 400 mW

- Frequency ranges
  - 2.412 – 2.483 GHz
  - 4.94 – 4.99 GHz
  - 5.15 – 5.25 GHz
  - 5.25 – 5.35 GHz
  - 5.470 – 5.725 GHz
  - 5.725 – 5.795 GHz

- 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, OFDM
    - 6 Mbps: -90 dBm
    - 54 Mbps: -73 dBm

- Ability to configure 5, 10, 20 and 40 MHz channel bandwidth (5 and 10 MHz configuration available on 4.9 GHz)
- Dynamic Frequency Selection (DFS)
- Media Access Control: CSMA / CA with ACK

Traffic Prioritization
- Quality of Service (QoS 802.1p)

Network Ports
- 1 weatherized RJ-45 10/100/1000 Mbps Ethernet port

Security and Encryption (model specific)
- WPA/WPA2 Wireless encryption
- 128 bit / 256 bit end-to-end AES
- MAC address filtering
- Digitally signed firmware files
- Digital certificates on nodes

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

Enclosure
- Cast aluminum NEMA 4X/IP66 enclosure
- 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: 56 V / 0.55 A powered via 802.3at PoE PSE
- External DC Input: 15 V / 3.0 A
- Power consumption: 12 W (Typical), 28 W (Max)

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): Max to 90%
- Storage humidity (non-condensing): Max to 90%
- Max altitude: 15,000 ft (4,572 m)

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

Optional Accessories
- Antennas*
- PoE Power injector
- Cable assemblies

*For more information refer to antenna & accessory guide

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