HotZone Duo

Dual-Radio Meshed Wi-Fi System

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MOTOwi4

Motorola's HotZone Duo is a high performance, meshed Wi-Fi solution designed to meet strict cost per square mile and ROI targets.

HotZone Duo is part of the MOTOwi4 family of broadband wireless access technologies, and delivers a new level of economic flexibility and investment protection to municipalities and service providers. Available in single or dual radio configurations, HotZone Duo leverages Motorola's field-proven, MeshConnex routing engine and MeshManager element management system to meet the challenges of demanding multi-use networks. Its small size, minimal visual impact and low power consumption increases mounting location flexibility while achieving high community acceptance.

Motorola's mesh networking technology enables users to wirelessly access broadband applications seamlessly – virtually any time and anywhere. Whether providing wireless access to a campus, municipality or residential neighborhood, Motorola's mesh networking technology delivers real-time data to your employees, customers and constituents.

Scalable & Manageable Mesh Solution

HotZone Duo provides a scalable and cost effective solution for large and small Wi-Fi deployments. Proven MeshConnex routing minimizes network overhead, while delivering fast route convergence and low hop latency. HotZone Duo also leverages MeshManager – Motorola's widely deployed, carrier class Element Management System (EMS). Configuration, security policies, reporting, and Over-the-Air (OTA) software updates are just a few of the capabilities available from the MeshManager GUI.

Single or Dual-Radio Operation

HotZone Duo can be configured with one 2.4GHz 802.11b/g radio, or with two radios (802.11b/g at 2.4GHz, and 802.11a at 5.8GHz). Dual radio operation dedicates the 802.11a radio to carrying the meshed backhaul, and frees the 802.11b/g radio for dedicated client access. This configuration increases throughput by up to 100%, while dramatically reducing packet latency and interference issues. High performance radios deliver 36 dBm EIRP transmit power and -100dbm receiver sensitivity.

Small Size Increases Community Acceptance

HotZone Duo packs a lot of performance into one of the smallest and lightest form factors on the market today. Low profile, slim-line aesthetics increase mounting location flexibility and community acceptance. Low power consumption can increase installation options and help reduce monthly operational costs.

Easy to Install and Deploy

At under 5 lbs, HotZone Duo nodes can be quickly and safety installed by a single person, in about 15 minutes. Flexible mounting hardware can be attached to utility poles, traffic signals, billboards, buildings, etc. Innovative, weatherproof power and network connectors make reliable deployments quick and easy. Nodes automatically power up and integrate themselves into the HotZone Duo network, saving money and time.

Powerful Investment Protection

The IEEE is creating a new standard for meshing Wi-Fi systems, known as 802.11s. This standard is being developed to define common features and ensure interoperability between mesh network equipment vendors. HotZone Duo networks are designed to support the final 802.11s standard via a simple Over-the-Air firmware update. Motorola's commitment to standards, interoperability and the latest technology helps protect your investment.

HOTZONE DUO RADIO CHARACTERISTICS

Primary Radio Operating Freq. (GHz)	2.4 to 2.4835 (2nd ISM band)
Secondary Radio Operating Freq. (GHz)	5.725 to 5.850 (U-NII band)
WiFi Support	802.11b/g at 2.4GHz; 802.11a at 5.8GHz
RF Modulation	CCK / OFDM
Output Power (Maximum)	36 dBm EIRP
Power Control	1dB increments
Receive Sensitivity	-77 dBm (at 54 Mbps) to -100 dBm (at 1 Mbps)
Antenna Type	Two (2) omnidirectional, 8 dBi (optional 4 or 6 dBi)
Antenna Connector	N-Type

ROUTING

Routing Engine	MeshConnex Layer 2 routing with Layer 1 situational-awareness
Routing Protocol	Patented, hybrid proactive/reactive routing (low latency & fast route convergence)
IEEE 802.11s Support	Upgradeable to final IEEE 802.11s standard via OTA software updates

NETWORK

Network Management Software	MeshManager Element Management System via secure SNMP v.3
Network Interface	Ruggedized 10/100Mbps Ethernet (RJ-45) port with surge suppression
Network Segmentation	Multiple SSIDs with VLAN mapping
Quality of Service (QoS)	802.11e, weighted fair queuing and IP precedence bits (ToS) supported via DSC

SECURITY

Virtual LAN (VLAN)	Supports up to sixteen (16) per node, or 4094 per network
Client Encryption Support	WEP, WPA (TKIP) and WPA2 (AES, 802.11i)
Internodal Encryption	Hop-by-Hop Security
Authentication	802.1X (Infrastructure/Client) and MAC address hardware authentication

POWER

Power Requirements	120-240 VAC (with +/- 20% variation at 50-60Hz)
Power Connector	AC, NEMA 5-15 power cord • 8 ft (2.44m)
Power Consumption	15W (with both radios operating at 50% duty cycle)
Power over Ethernet (PoE)	Support for Canopy PoE connection

PHYSICAL

Dimensions	9"x 6"x 3.5" (23.1cm x 15.2cm x 8.9cm)
Weight	4.5 lbs (2.04kg)
Packaging	Outdoor, all-weather enclosure (NEMA 4)
Mounting	3" (7.62cm) diameter post mounting

ENVIRONMENTAL

Temperature Range	-30 to 60 °C
Humidity	0 to 100%, non-condensing
Certifications	FCC Part 15 & 90, UL, CSA

AVAILABLE OPTIONS

Mounting	Lamp post mount bracket assembly
Power	AC photo cell adapter
DC Input	HotZone Duo with 5-15 VDC input

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HotZone Duo Additional Network Features

- WEP, WPA, and WPA2 (802.11i) Support for Wi-Fi Clients
- Layer 2 Multicast Support
- Differentiated Services Using 802.11e IP Quality of Service (QoS) Support
- Over-the-Air Software Upgrade Support
- MAC Access Control Lists
- SNMP Agent for Remote Management
- Firmware Upgrades via Trivial File Transfer Protocol (TFTP)
- Enterprise-Class Port & Broadcast Storm Filtering
- Hop-by-Hop Security™