



wi4 Mesh

MOTOMESH™ Quattro

Four Radio Meshed WiFi Network with Mobility Enabled Access

Motorola's MOTOMESH Quattro is the multi-radio broadband solution for Public Safety, Public Works and Public Access



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.

Licensed 4.9GHz and Unlicensed 2.4GHz

Every MOTOMESH access point contains two standards compliant 802.11 (WiFi) radios and two of Motorola's acclaimed Mobility Enabled Access (MEA) broadband radios. One set of WiFi and MEA radios operate in the unlicensed 2.4GHz band. The other operates in the 4.9GHz public safety band.

Public Safety, Public Works and Public Access

MOTOMESH Quattro is a wide area, multi-radio solution that offers the security, capacity and flexibility cities need. It can deliver mobile broadband access to diverse municipal agencies, as well as WiFi access to the public. MOTOMESH Quattro architecture supports up to four radio networks in a single access point and is built on Motorola's proven MEA mobile broadband networking technology.

State of the Art Mesh Networking

By leveraging technology originally developed for the battlefield, MOTOMESH Quattro supports high-speed data, video, and position location services for fixed and mobile users. Data links automatically self-form and self-heal between users and network infrastructure. Because every access point is meshed, backhaul, deployment and operational costs are greatly reduced. Municipalities of all sizes may realize a higher ROI than with traditional networks.

Seamless Mobility – Even at High Speeds

Seamless broadband data connectivity is available throughout the network to both stationary and mobile MEA users. This constant connectivity can be used to deliver real-time, remote monitoring of in-vehicle video – even when traveling in excess of 150 mph.

Form Instant Tactical Data Networks

The Multi-Hopping capabilities of the MEA network allow client devices to form instant, ad hoc broadband networks where no predeployed infrastructure exists. Each MEA radio acts as a router/repeater for all other MEA devices in the network. MEA users can "hop" through neighboring devices to communicate with each other – or to reach distant network access points that can connect them to other data and voice networks.

Fast and Accurate Position Location

Depending on network configuration, patented position location technology is available to every MEA device. Using this technology, users know where they are and can instantly find out where any other user is, without having to rely on GPS satellites. Location can be determined in places that GPS satellite signals cannot penetrate, like urban canyons, inside buildings, tunnels, or other obstructions. Users can be located in less than one second, providing quick and accurate location information for personnel or asset tracking.

A Total End-to-End Solution

Motorola's wireless broadband portfolio offers an array of access and backhaul technologies for complete end-to-end municipal wireless initiatives. Motorola wi4 Fixed Point-to-Multipoint and Point-to-Point solutions can provide reliable, high-capacity Internet backhaul links to Motorola mesh networks. MeshPlanner and MeshScanner enable detailed network planning and optimization capabilities. Additionally, Motorola's MOTOWi4 Ready Applications Ecosystem offers a wide range of validated solutions to generate immediate benefit from your wireless network.

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SPECIFICATION SHEET

MOTOMESH Quattro
Four Radio Meshed WiFi Network
with Mobility Enabled Access

BENEFITS

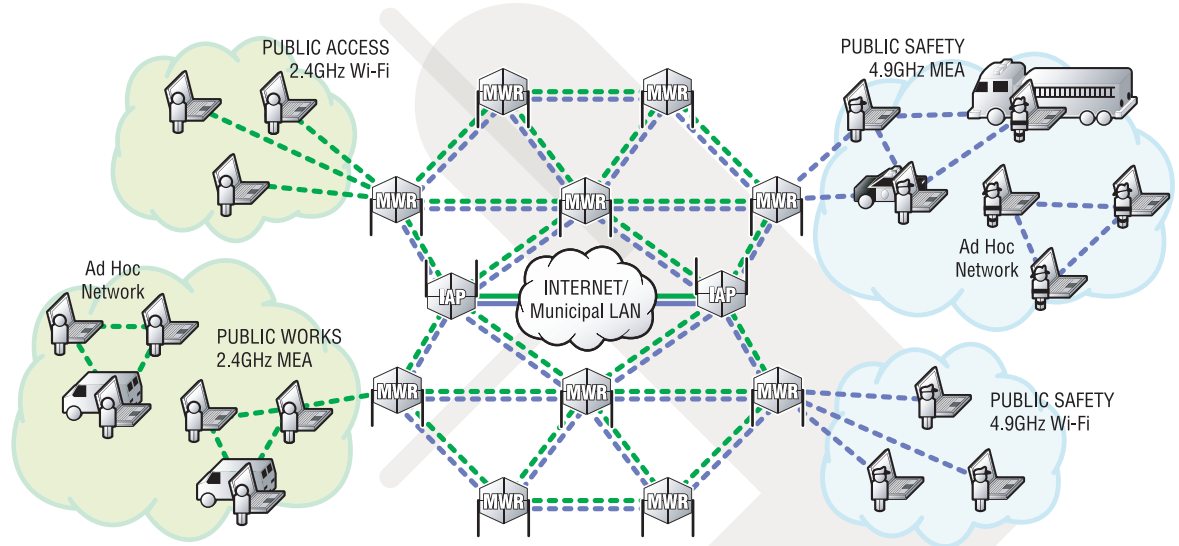
- Best-in-class radio performance
- Reliable coverage
- Best-in-class throughput
- Robust security

MOTOwi4

MOTOMESH Quattro is part of the MOTOwi4 family of broadband access technologies, a comprehensive platform of wireless broadband solutions, applications and services. Designed to complement and complete wireless networks, MOTOwi4 solutions address a broad range of applications across municipal, enterprise, and operator segments. The comprehensive MOTOwi4 portfolio creates a true end-to-end ecosystem of complementary products, services and solutions that provide high speed connectivity enabling a broad range of applications in fixed, nomadic, portable or mobile environments. Working together, wi4 Mesh solutions combined with other MOTOwi4 access technologies deliver ubiquitous, metro-wide (community-wide, campus-wide) wireless broadband coverage.

WHY MOTOROLA

Motorola is uniquely positioned to address the wireless broadband market through the MOTOwi4 vision. Motorola has aligned its business units and roadmaps to provide a comprehensive, end-to-end solution covering all aspects of the broadband wireless access deployment. With our deep and extensive patent portfolio, over a decade of R&D investment, and our experience as a global supplier of broadband wireless access solutions, Motorola is primed to deliver its best in class wireless networks. Motorola is committed to leading the industry with end-to-end wi4 Mesh solutions addressing the full scope of the operator's deployment needs including access, core, devices, network management and services.



PUBLIC SAFETY BENEFITS

- 4.9GHz band gives dedicated access to First Responders
- Both the uplink and downlink run at broadband speeds
- Allows the desktop to move into the field for improved efficiency and responsiveness
- Instantly forms a broadband network between MEA users
- MEA radios offer seamless connectivity at highway speeds
- All MEA devices are capable of providing location and tracking information, indoors & outside – without the need for GPS
- Supports standards body initiatives to leverage 802.11 technology into the 4.9GHz band
- Users from other city agencies and the general public do not impact public safety access

PUBLIC WORKS BENEFITS

- Improves productivity by reducing trips to headquarters for data retrieval or report filing
- Seamless broadband connectivity turns time in the field into productive time
- Enables paperless dispatching, work orders and reporting
- Supports AVL services for tracking and accountability
- Enables remote work site and vehicle video surveillance

PUBLIC ACCESS BENEFITS

- Increases resident, business and visitor satisfaction
- Public WiFi access can be provisioned at a few hotspots, on buses & public transportation, or supported citywide
- Public access can be deployed as a free service or as a revenue generator to help accelerate ROI
- Access available to any WiFi enabled device or PC card

MOTOMESH NETWORK COMPONENTS

IAP7300 / Intelligent Access Point

The Intelligent Access Point (IAP) provides the wireless gateway between a MOTOMESH Quattro network and the wired world. If greater network capacity is required, additional IAPs can be easily deployed. The self-forming, self-healing and self-balancing routing inherent in the network minimizes the need for expensive site planning. Dual, independent backhaul connections keep mission critical data secure and separate from the public network.

MWR7300 / Mesh Wireless Router

The Mesh Wireless Router (MWR) extends coverage and connectivity by meshing IAPs and users together. Data signals can hop through one or more MWRs to enable non-line-of-sight communications. MWRs also act as reference points for position location.

WMC7300 & WMC6300 / Wireless Modem Card

4.9GHz and 2.4GHz MEA wireless access cards allow any computing device that supports PC cards to access a MOTOMESH Quattro network. These cards also form instant broadband meshes between themselves and other MEA client devices when no MOTOMESH infrastructure is present.

VMM7300 & VMM6300 / Vehicle Mounted Modem

4.9GHz and 2.4GHz MEA wireless modems provide a mobile, high bandwidth radio, and feature a standard RJ-45 Ethernet port to support laptops, hubs, printers, IP video cameras or any other Ethernet-ready device. The VMM also forms an instant broadband mesh with any other MEA device.

MeshManager / Network Management

MeshManager provides a single, comprehensive network management suite for controlling security policies, network provisioning, client administration and performance monitoring for all of the devices in a MOTOMESH Quattro network.



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Motorola, Inc. www.motorola.com/mesh

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