Motorola Wireless Broadband

Video Surveillance Solutions

Maximize Video Surveillance Performance and ROI.

With today's increased emphasis on public safety and asset protection, the world has begun looking at security more closely and critically. In the wake of an unpredictable series of natural and man-made disasters, security has become a major priority worldwide. Municipalities, government agencies, businesses, healthcare systems, educational institutions and many others are looking for reliable systems to help them better protect people and property. These systems must also comply with stringent new mandates requiring significant improvements in security systems, functionalities and results.

New Security Technology

Advanced new security technology is empowering these organizations to keep pace with the fast escalating demand for increased protection and safety. At the forefront of enhanced security technology solutions is real-time visual monitoring of people and places through powerful, versatile new video surveillance networks and technologies.
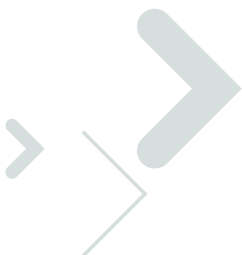
Seeing is Protecting

Organizations all over the world are realizing the effectiveness of protecting people, places and things with advanced video surveillance systems. Round-the-clock monitoring of vulnerable areas and locations provides for real-time situational awareness, and allows for fast and appropriate response in time to make a difference.

Reliable, Cost-Effective
Video Surveillance from Motorola

MOTOwi4™ IP-based video surveillance networks are purpose-built to deliver best-of-breed video surveillance infrastructure, technology and solutions. Leveraging more than 75 years of wireless technology expertise, innovation and leadership, MOTOwi4 video surveillance solutions are easy to deploy and increase the power, efficiency and cost effectiveness of sight-based security systems.

Build and Extend Networks Cost Effectively with IP-Based Solutions.

A worldwide consensus on video surveillance technology is rapidly developing. More and more organizations view the integration of physical and information security functions as a critical component of the overall enterprise risk management strategy. As a result, security conscious organizations around the globe are choosing all-digital IP-based systems such as MOTOwi4 solutions from Motorola.
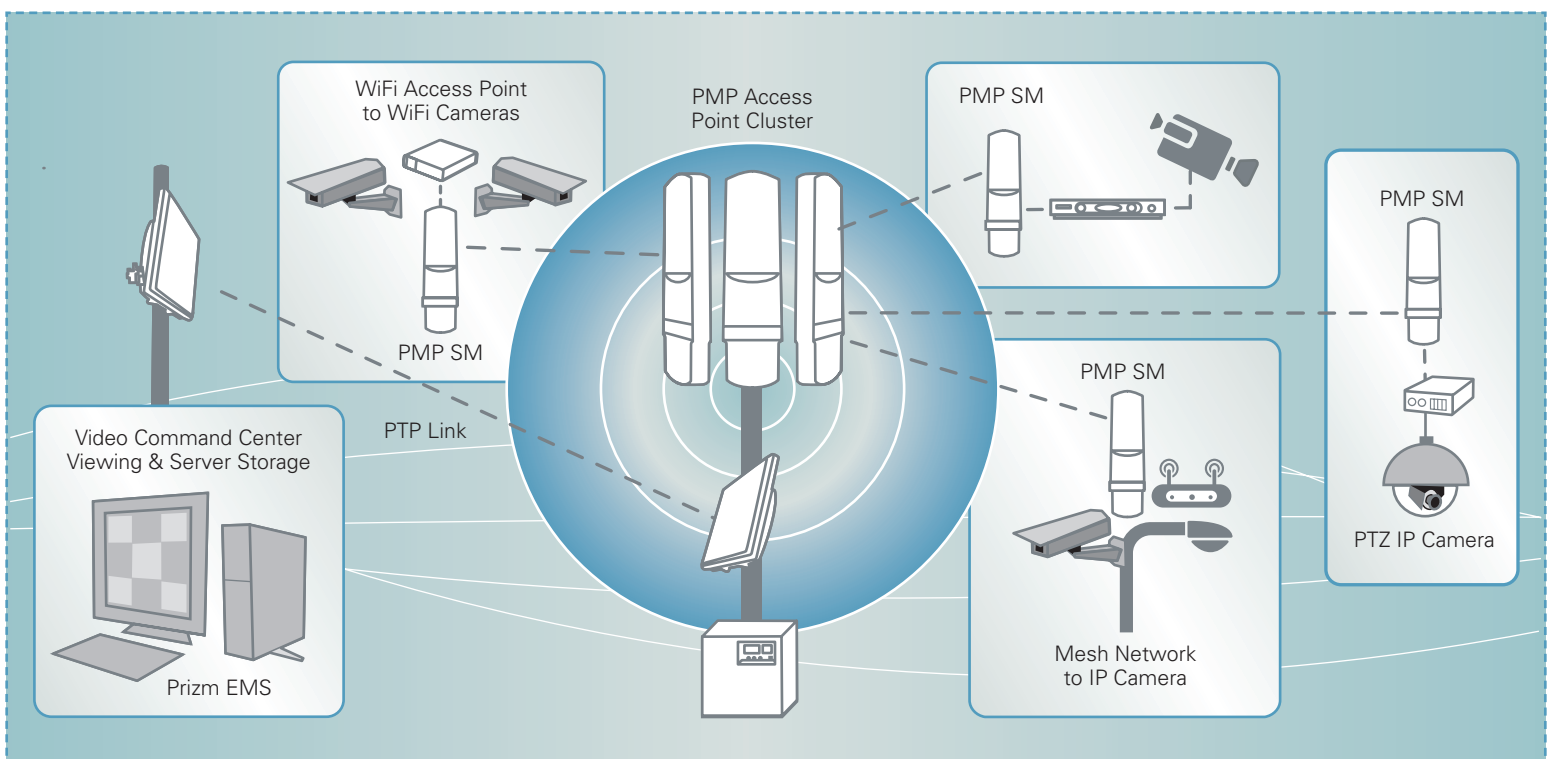
IP-Based Advantages

In comparison with analog or hybrid systems, IP-based solutions offer a number of important advantages, among them:

- **Faster Awareness and Response.** Intelligent technology and advanced analytics provide real-time situational awareness for faster problem recognition and response and more successful resolution of safety and security issues.

- **Lower Cost.** Wireless IP-based security solutions are faster and less costly to deploy because there is no digging, wiring or cabling necessary. They're also less costly to implement and manage. Operations and maintenance costs can be significantly reduced, and savings resulting from eliminating T1/E1 leased lines are substantial.

- **Leverage Existing Investments.** IP-based technology is compatible with existing analog or hybrid video surveillance systems, so you can extend and improve your current network without the hassle and expense of having to start over. The network can be further leveraged to accommodate emerging technologies such as VoIP.

- **Converged Networks.** MOTOwi4 IP-based systems serve as reliable, cost-effective back-bone infrastructure for transporting any type of IP surveillance traffic. This includes video, voice and data captured and transmitted by sensors, optical trip wires, perimeter radar, biometrics and RFID systems.

- **Remote Monitoring.** To help centralize monitoring operations, IP-based video surveillance solutions enable network operators to integrate both operation and management of new cameras into the existing video command center.

- **Enhanced Data Security.** MOTOwi4 solutions offer multiple levels of security and include proprietary technology that ensures tamper-resistant transmission of digital images, especially crucial for preserving evidence.

WiFi Access Point to WiFi Cameras

PMP Access Point Cluster

PMP SM

PMP SM

PMP SM

PMP SM

Video Command Center Viewing & Server Storage

PTP Link

Prizm EMS

Mesh Network to IP Camera

PTZ IP Camera

Comprehensive Safety and Protection Inside and Outside.

Now you can place a surveillance camera wherever you need it. MOTOwi4 wireless infrastructure allows you to deploy and extend video surveillance capability in virtually any indoor or outdoor environment. MOTOwi4 delivers versatile, reliable 24/7 video surveillance in fixed, mobile and nomadic complementary IP-based technologies.

The MOTOwi4 wireless broadband portfolio ensures maximum deployment flexibility with fixed, mesh, indoor and WiMAX solutions, as well as services and network management capabilities.

wi4 Fixed

Point-to-Multipoint (PMP) Solutions

Motorola's PMP system provides solutions in unlicensed and managed frequencies from 900 MHz to 5 GHz spectrums. With its patented signaling technique, the PMP system delivers an industry leading low Carrier-to-Interference (C/I) ratio. A reliable, high-speed wireless backbone solution, it currently powers cost-effective networks in more than 120 countries, offering aggregate data rates of up to 21 Mbps.

Point-to-Point Solutions

Motorola Point-to-Point (PTP) systems offer solutions in licensed and unlicensed spectrums, delivering carrier-grade service for transmitting surveillance video between two points in line-of-sight (LOS), non-line-of-sight (NLOS) and in harsh environments including over water.

wi4 Indoor

MOTOwi4 Indoor includes Enterprise Wireless LAN (WLAN) and Broadband Over Powerline (BPL) solutions that enable quick and cost-effective distribution of high-speed broadband.

Enterprise WLAN

Organizations in numerous industries use wi4 WLAN solutions to help manage product quality and employee safety by monitoring points of activity. Today, WLAN technology powers nearly 100,000 enterprise class wireless networks worldwide.
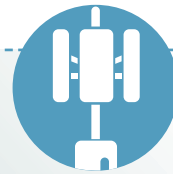
BPL

BPL solutions transform a building's existing electrical grid into a powerful communications network, offering video surveillance in older buildings where traditional Ethernet or fiber cabling would damage the building's historical integrity.
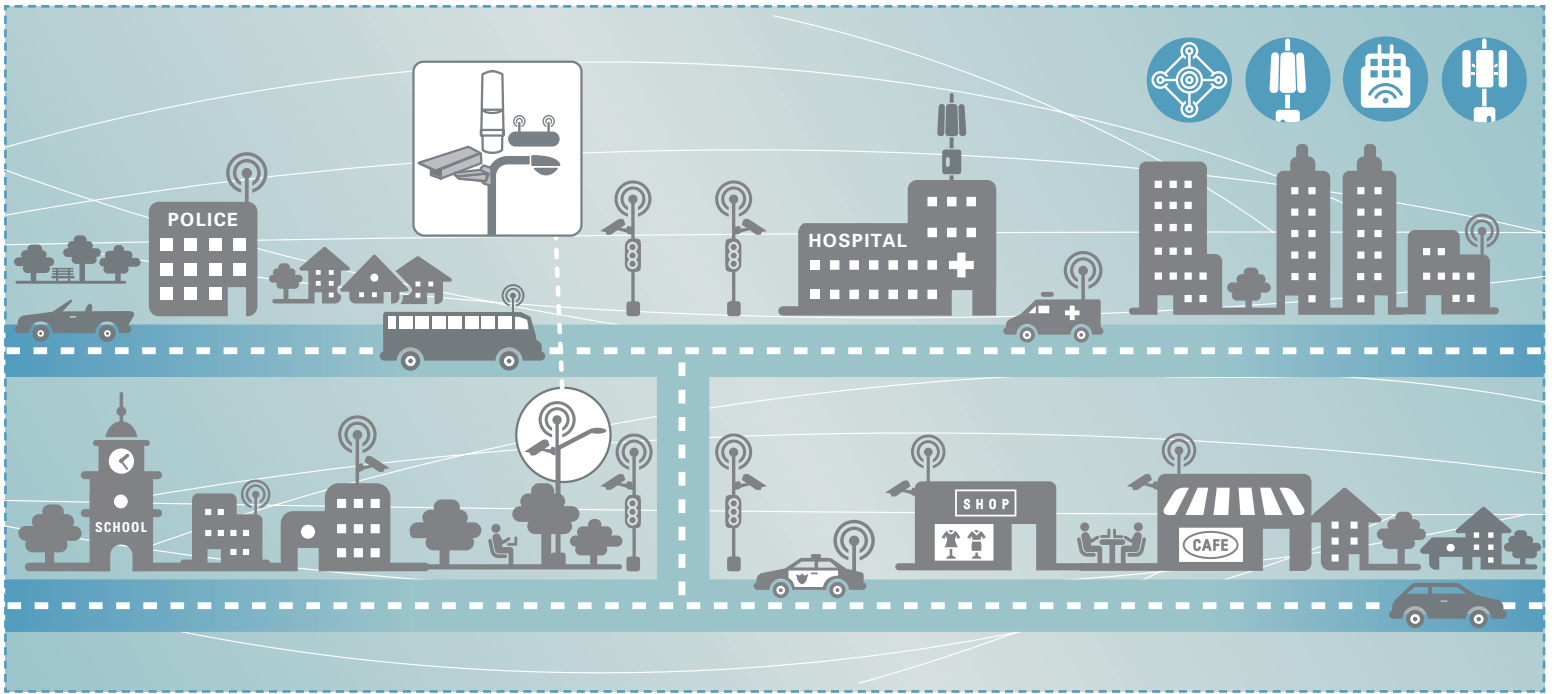
wi4 Mesh

Motorola's MOTOMESH™ broadband solutions are designed to dramatically improve situational awareness and incident response. Originally developed for battlefield communications, the MOTOMESH Mobility Enabled Access (MEA) network uses multi-hopping technology that enables client devices to actually become the network. MEA technology integrates directly with Sony's IPELA cameras to create surveillance solutions that are smaller and more cost effective than conventional wireless video systems.

wi4 WiMAX

MOTOwi4 also includes wi4 WiMAX and Point-to-Multipoint Expedience® solutions, so organizations can build the video surveillance broadband network that best meets their business needs. Wi4 WiMAX offers mobile and fixed capabilities, and uses a high performance, standards-based broadband access portfolio that operates in licensed frequencies.

The Reliable Choice: Motorola's Purpose-Built Video Surveillance Solutions.

MOTOwi4 video surveillance solutions are helping to enhance safety in some of the world's most security conscious applications, and under some of the most difficult conditions in a wide variety of customer environments.

Public Safety.

Municipal governments utilize Motorola video surveillance solutions for real-time monitoring of crime-prone areas, out-of-the-way locations and specific neighborhoods and intersections. Interoperability and real-time video and data transmission across multiple agencies helps increase situational awareness, improve police and fire safety and response time, maximize citizen safety and qualify for Homeland Security funding.

Transportation.

Government Departments of Transportation utilize real-time video surveillance to monitor road conditions, control traffic signals, streamline traffic flow and minimize accidents and emissions. Commercial transportation providers such as airlines, airports, railroads, marinas and ports are using MOTOwi4 video surveillance networks to help protect passengers and personnel, plus provide enhanced security for facilities, cargo containers and capital equipment.

Education.

Educational environments—including universities, colleges, schools and school districts—are using video surveillance networks to increase student, faculty and staff safety. Applications include: monitoring of interior classrooms, labs and lecture halls; outdoor uses such as monitoring dormitory premises and hard-to-reach locations; and integration with emergency notification systems.

Private Enterprises.

In addition to the applications shown above, many private sector environments—such as manufacturing, retail, financial services, healthcare and more—use Motorola's video surveillance capabilities to increase safety and efficiency simply, quickly and cost-effectively.

BEYOND SURVEILLANCE: OTHER IP-BASED VIDEO APPLICATIONS

IP-based video technologies are transforming the way many organizations work. Healthcare providers are saving lives through real-time image transmission. Corporate training departments can extend professional development opportunities to teleworkers and remote employees. Schools use video systems to offer the convenience of collaboration and distance learning programs. Businesses use video conferencing to increase efficiency and save on travel.

Monitoring MOTOwi4 Video Surveillance Solutions Around the World.

"The cameras placed in our dormitories have served not only as a deterrent to vandalism, but have helped us recover lost, damaged and stolen property."

Coastal Carolina
Bringing Campus Safety into Sharp Focus
Wi4 Fixed indoor and outdoor video surveillance solutions help Coastal Carolina University (CCU) enhance campus safety and security while providing high-speed connectivity and Internet access for remote buildings without phone lines or fiber.

"The video surveillance system allows Sergnano's two-man police force to control 100 percent of the territory without moving from the control room."

Sergnano, Italy
Putting Safety First
Sergnano, a small town of just 3,000 people, employs only two law enforcement officials. Fortunately, they can cover a much bigger territory more effectively thanks to a closed-circuit television (CCTV) system supported by a wi4 Fixed PMP broadband wireless network.

"We have a limited number of officers in the field. Our video surveillance cameras allow us to check 20 different locations simultaneously, helping us be 20 times more efficient."

Ripon, CA
In Police Work, Information is Everything
After their cellular service that provided officers with limited access to data in the field discontinued the service, Ripon police installed a wi4 Mesh network that now gives police units more widespread situational intelligence, enabling them to act faster and more effectively.

"For years we have been seeking a solution to the challenges we have faced with traditional phone lines. Motorola has provided that solution through its wireless technology."

Road Commission for Oakland County (RCOC)
Safer and Less Congested Roads
Faced with a growing traffic congestion problem, the RCOC of Oakland County, MI turned to video surveillance technology to help manage adaptive traffic signal systems and reduce the costs of leased lines. Their Motorola wireless network now transmits images and data more efficiently and cost effectively.

MOTOwi4 Wireless Broadband Solutions
Motorola's IP-based video surveillance solutions are part of the MOTOwi4 portfolio—a comprehensive portfolio of wireless broadband solutions and services that provides high-speed connectivity, enabling a broad range of applications in a host of environments. The MOTOwi4 portfolio includes wi4 Fixed, wi4 Mesh, wi4 Indoor and wi4 WiMAX solutions for public and private networks.

MOTOROLA