INTEGRATED. INTELLIGENT. ADAPTABLE.
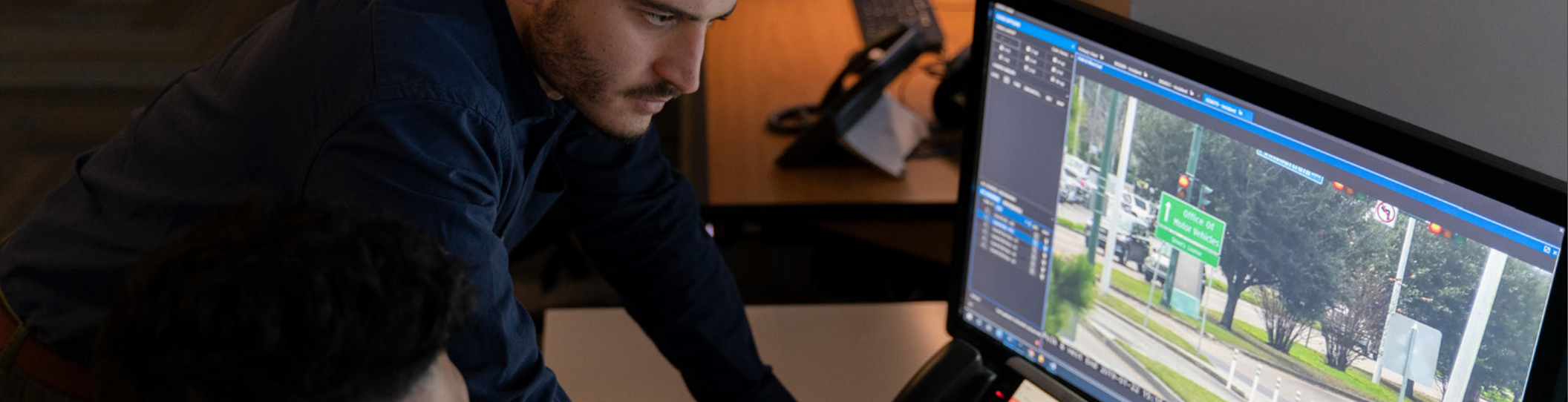
MOTOROLA SOLUTIONS MISSION-CRITICAL VIDEO SOLUTIONS PORTFOLIO GUIDE

MOTOROLA SOLUTIONS

Today, mission-critical video solutions are at the core of effective security and situational intelligence. Yet, when it comes to video, more is not always better and the choices can be overwhelming. It can be hard to know where to start.

We can help.

The Motorola Solutions mission-critical video solutions portfolio delivers superior situational intelligence. Our technology helps you keep operations safer and teams better informed with constantly learning Artificial Intelligence (AI)-enabled analytics that instantly recognise what's important and what's not.
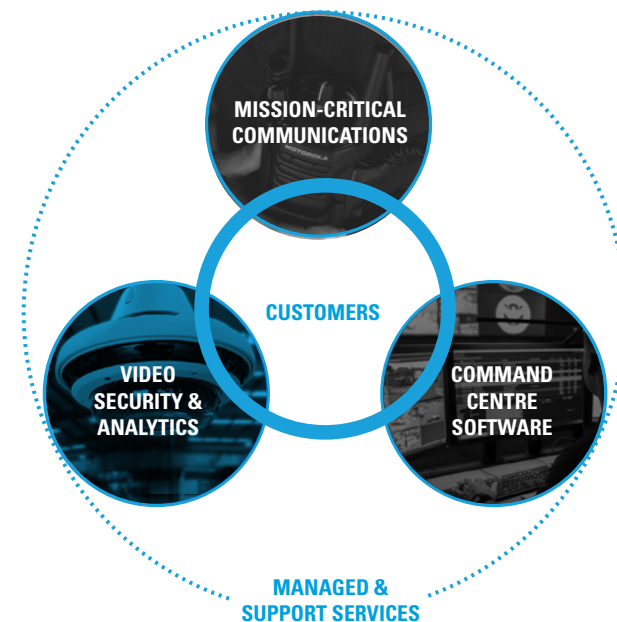
It's not just more video. It's smarter video.

Our engineered video solutions combine on-premises and cloud-hosted technologies (on mobile environments) to address any need in your organisation's hybrid environment. They're simple to use, flexible to your specific mission, can easily integrate with other information communication technology, and are scalable across multiple locations.

That means your organisation can start on the edge, creating new efficiencies for legacy management systems or solving tough visibility challenges in higher priority areas. Or you can start at the command centre with video management systems that integrate video with access control and radio systems for more control and faster actions.

The Motorola Solutions Mission-Critical Video Portfolio Guide was created to make it easy to see our full range of video solutions, all in one place.

MISSION-CRITICAL ECOSYSTEM

Motorola Solutions Mission-Critical Ecosystem creates the lifeline your safety, security, and mission depend on. A single platform where communications, software, video and services operate seamlessly together reveals insights to drive improved situational awareness, early decision-making, and rapid response.

MADE IN NORTH AMERICA WITH GLOBALLY SOURCED PARTS

SOFTWARE/FIRMWARE MADE IN NORTH AMERICA

Motorola Solutions proudly manufactures and deploys the sophisticated, cutting-edge communications, software, video security and analytics technologies that keep communities and nations safe. We have been on the frontlines with national, provincial and city governments, including in times of crisis, for over 90 years.

Motorola Solutions offers U.S.-assembled end-to-end FIPS-certified video surveillance solutions, which are NDAA-compliant. We have a state-of-the-art assembly facility in Richardson, Texas. By manufacturing in the United States with globally sourced parts we provide a level of quality our customers can trust, while being able to accelerate the speed at which we can go from innovation to providing products for our customers around the globe.

Our company manufactures and develops an end-to-end video solution. Our end-to-end solution is designed to let the technology do the work of detection and visualising the data to your personnel so they can apply reasoning.

Our solution, when deployed end-to-end, is a powerful ally, enabling greater precision in safety and security and allowing people to effectively focus on critical events with fewer distractions. Our solutions are available to make an impact for your operations today.

For more information: **MotorolaSolutions.com/NDAA**

ADVANCED VIDEO CAPABILITIES

Not all video solutions are made equal. With automation, AI, and deep learning analytics at their core, our intelligent video solutions are built with advanced capabilities that deliver more value to your organisation. Shorten video searches from days to mere minutes. Automatically train your software for continuously refined accuracy and speed. With adnvanced features like appearance search, unusual activity detection and self-learning neural networks, your teams receive the assistive AI support they need to operate more efficiently and effectively and be their best in the moments that matter.

APPEARANCE SEARCH TECHNOLOGY

An AI-powered search engine can quickly identify and locate a specific person or vehicle or reproduce their actions in investigations. This powerful search engine sorts through hours of footage with ease once an operator selects specific physical descriptions, including age, gender, clothing colour and hair colour. It even notes specific characteristics of a person's face in case other identifiers, such as clothing, change over time.

FACE MATCH CAPABILITY

AI-powered facial recognition helps accelerate response times by identifying people of interest more accurately. With "Face Match Alerts" people of interest are identified based on a secure, controlled watch list created and maintained by authorised users at the organisation. Avigilon cameras licensed for facial recognition will seek to identify potential matches to the watch list and alert an operator with the Avigilon Control Centre (ACC) software to determine if security personnel action is necessary.

NUMBER PLATE RECOGNITION

Automatically reads number plate information from vehicles on both live and recorded video. User can create and import multiple vehicle number plate watch lists for instant alarm notification when a number plate match is detected, or search and quickly find specific captured number plate video for verification and investigation.

In addition, number plate recognition can also be used for security checks at entry points, where pre-registered number plates, along with facial recognition, can be used to positively match the driver to the vehicle and allow for gate entry. This is the power of analytics and automation.

FOCUS OF ATTENTION

Increase operator effectiveness by providing a simple graphical representation of events occurring across all on-site cameras. The focus of attention screen includes Avigilon analytic events, such as, face and number plate recognition matches, Unusual Motion Detection (UMD) events, Unusual Activity Detection (UAD) and access control alarms. This screen is highly configurable to draw the operator's attention to the events and alarms that matter most. Operators can quickly triage the most important events by reviewing the associated live and recorded video to determine if a response is required.

NEXT-GENERATION AND SELF-LEARNING VIDEO ANALYTICS

Automatically recognise and detect the movements of people and vehicles, while notifying operators of events that may need further investigation. Avigilon's camera-based self-learning video analytics technology is uniquely plug-and-play, designed to detect and learn the surrounding scene upon initial set up, adapting to changes without manual calibration. Rather than decreasing detection sensitivity to reduce false alarms, our teach-by-example technology allows the system to learn by providing feedback on specific alarms, helping to increase accuracy over time. Avigilon self-learning analytics extend the effectiveness of your security personnel by providing effective monitoring 24/7/365 and enabling proactive, real-time response from your team. Avigilon Control Center video management software allows analytic events and alarms to be viewed and searched through an intuitive user interface. Real-time events and forensic capabilities detect and notify operators of scene changes and rules violations.

UNUSUAL MOTION AND ACTIVITY

Artificial Intelligence (AI) brings a new level of automation to surveillance and is designed to reveal events that may have otherwise been missed. Without any predefined rules or setup, this technology continuously learns typical movement in a setting, then detects and flags unusual motion - motion that is different than what normally occurs - for further assessment. This allows operators to search through large volumes of footage faster, as this AI technology focuses their attention on the atypical events that may need further investigation, reducing hours of work to minutes. Artificial intelligence powers object-aware detection of atypical activities on learned objects, such as people and vehicles travelling at faster speeds or in unusual locations.

EFFICIENT BANDWIDTH MANAGEMENT

Avigilon High Definition Stream Management (HDSM) and HDSM SmartCodec™ technologies reduce bandwidth and storage needs while maintaining image quality.

VIDEO ANALYTICS AND AI IN ACTION:
ADDRESSING NEW CHALLENGES & RISKS IN A PANDEMIC

Video analytics and AI empower your agency to solve its most pressing challenges today with existing infrastructure. Entering 2020, few agencies could imagine the impact the COVID-19 pandemic would have on their operational risks and organisational policies. However, for those who had Motorola Solutions video systems in place, they were able to leverage new analytics-powered solutions to adapt to new challenges and ensure compliance with necessary operational changes. Moreover, it allowed them to do so in a cost-effective way for their business since the prerequisite hardware and software was already in place. Some examples of the new innovations Motorola Solutions developed to meet COVID needs in 2020 include:

OCCUPANCY COUNTING TECHNOLOGY: Automate the counting of people entering and exiting a facility with AI-powered video analytics. Dashboards empower operators to understand peak periods and high traffic access points that require more attention.

THERMAL CAMERA TECHNOLOGY: Workplaces can pre-screen at access points with the H4 Thermal Elevated Temperature Detection solution to detect faces and notify medical professionals of indications of elevated body temperatures, so that further evaluation may take place.

SOCIAL DISTANCING TECHNOLOGY: AI-powered analytics on Avigilon video security cameras can continuously monitor social distancing efforts within your facility. Facility managers can run a report and identify zones and times requiring corrective measures.

FACE MASK DETECTION TECHNOLOGY: Individuals not following health guidelines around the use of protective face masks can be detected using Avigilon video analytics on security cameras, with the ability to run reports for compliance levels.

For more information:

MotorolaSolutions.com/HealthResources

VIDEO SECURITY SYSTEMS & DEVICES

FIXED CAMERA NETWORKS

Our Avigilon fixed video security solutions provide our most robust analytical technology, capable of recognizing people, vehicles, faces and number plates to give unparalleled situational awareness for normal operations and during emergencies and natural disasters. With Avigilon fixed video security solutions, you can set discrete rules for alerts around specific events, including nine different types of motion detection, and set watchlists for the appearance of a particular face or vehicle number plate. You can also let AI take over and detect unusual activity for you. When an incident necessitates footage to be found and reviewed, the embedded analytics enable you to quickly conduct an appearance-based search for a person, vehicle, number plate or face based on a reference frame in a video or a description.

For more information on Avigilon, a Motorola Solutions Company: **Avigilon.com**

BODY-WORN CAMERAS

Improve the safety and accountability of your front-line operatives with body-worn video cameras that deliver valuable insight from the wearer's perspective. The presence of a bodycam often helps to calm difficult encounters for base security, military police and peace-keeping missions and can provide crucial evidence to prove professionalism if confronted by contentious allegations. Simply press the record button to capture high-quality video evidence: models are available that can live-stream over Wi-Fi or LTE to a control room for centralised command and control. Our rugged body-worn cameras offer long battery life and store recorded footage securely to prevent tampering or accidental deletion.

For more information: **MotorolaSolutions.com/BWC**

IN-VEHICLE VIDEO SYSTEM

Our video systems provide users with a single solution for not only capturing valuable video footage, but also better equipping personnel with improved situational awareness. Our in-vehicle video system and V300 body-worn cameras work together seamlessly as a single system, capturing video from multiple vantage points and automatically synchronising it for playback and sharing. The WatchGuard 4RE video system has the expandability to provide a 360° view with the flexibility to automatically save and upload only from the cameras you choose.

For more information: **MotorolaSolutions.com/In-Car**

AUTOMATIC NUMBER PLATE READERS

Use our fixed or mobile cameras, combined with control management software, to detect vehicle number plates and take appropriate action. Create approved lists of vehicles to speed up entry to the base, or expired lists to warn of vehicles that have passed their authorization period. Configure alarms to trigger when an unknown vehicle that is not in your database is detected, then track their movements across the camera network. Our high-performing hardware, software and algorithms have been refined from years of experience and allow flexible deployment configurations so you can build a system that's right for your specific environment.

For more Information:
MotorolaSolutions.com/ANPR

RADIO ALERT

Integrate Motorola Solutions DMR and P25 devices with the Avigilon Control Center (ACC) to form Radio Alert so two-way radio users can receive and respond to ACC alarms from their MOTOTRBO™ and APX™ Series radio systems. Alarms resulting from Avigilon analytics, access control and number plate recognition watchlist match events are automatically pushed to Motorola radios in the form of text messages and text-to-voice alerts. Security personnel can acknowledge alarms directly from their radio, investigate and quickly send automated location-based intelligence, all without needing to continuously monitor activity on a computer screen.

For more Information:
Avigilon.com/Radio-Alert

PHYSICAL ACCESS CONTROL SYSTEMS

ACCESS CONTROL MANAGER (ACM)

The ACM™ system is a physical access control system for enterprise-class installations, designed to help you focus on securing your people, property and assets, while giving you the flexibility to respond to alerts wherever you are. It seamlessly integrates with Avigilon Control Center software to provide you with a powerful and unified security solution that helps you focus on what matters most to proactively monitor and secure your sites.

The ACM system is FIPS 140-2 compliant to ensure all critical system components, including readers, sub-panels, controllers, server appliances and the client browser meet requirements for data encryption.

For more Information: **Avigilon.com/ACM**

IP VIDEO NETWORK & CYBERSECURITY PROFESSIONAL AND MANAGED SERVICES

IP VIDEO NETWORK SERVICES

Are your core IP networks 'video solutions-ready'?

You may need to expand and upgrade your current solutions or purchase a complete turnkey IP video network that meets your cybersecurity and privacy needs. As an IP video and security end-to-end solutions provider, we can plan, design, implement, provide reference documentation and sustain your IP video network needs.

Motorola's IP video network services ensure that your local area network (LAN), wide area network (WAN) or both are designed to handle the unique needs associated with video security solutions by answering many questions, including:

Does your network have ample bandwidth (i.e. 1Gbps/10Gbps) to support the IP video demands of video devices and other security applications?

Can your network meet latency and jitter requirements to ensure sufficient service quality for IP video applications without impacting other production traffic?

With the addition of the video security solutions, do you need assistance to make sure that your IP video network meets your security & enterprise policies?

The following IP video network services leverage our 90-plus years of network expertise to assist with every phase of preparing your IP video networks to support your video security initiatives — from assessment and design through implementation — effectively enabling smooth and rapid deployment and adoption of your IP video security solution.

IP Video Network Assessment & Planning	Assess availability, performance, security, manageability, interoperability and scalability of your IP video LAN and/or WAN document gaps for follow-up action. Translate IP video security solution requirements into network requirements, system scale and usability.
IP Video Network Design and Integration	Provide design, staging and integration services for IP video LAN/WAN networks. Includes clarifying requirements, creating designs that close identified gaps, and providing interoperable designs addressing network, network management, and security needs.
IP Video WAN Backhaul Design and Integration	IP video backhaul design and integration services for IP video WAN networks with high reliability redundancy. Leverage your existing dark fibre or can provide new fibre links to communicate with our video aggregation and distribution switches as well as the video core locations.
IP Video Network Technical Support Services	Provide third-tier technical support staff for maintenance and troubleshooting of IP video network systems.
IP Video Network Sustainment	Network performance, analyzing system failures and determining root cause. Supplemental network monitoring (remote or on-premises) are available as well.

CONVERGED SECURITY AND INFORMATION MANAGEMENT

PROTECT SERIES

Resiliency starts with knowing that your organisation's systems and resources are prepared for all phases of an emergency or security incident from prevention to mitigation to response and recovery. With the Protect Series, agencies can rely on one powerful operations platform that seamlessly unifies all voice, video, and data from your security, operations, and information management systems. Now, you can take the power of integration to the next level, with the ability to gather real-time assessments and communicate information across any network, application, and device. When a security event is detected, the Protect Series automatically triggers relevant actions for each system in the area. It lets you quickly adapt to any contingency with greater control over resources, access, alarms, and mass notifications. The result is a highly intelligent and versatile solution, more powerful than each individual part.

VIDEO MANAGEMENT SYSTEMS: Integrate real-time video analytics from any source: fixed, body-worn, or aerial cameras. Conduct advanced searches using key descriptions of an object or person and make correlations across all video inputs.

SCADA SYSTEMS: Linked SCADA systems trigger events in other security and information management systems. Plus, they gain access to infrastructure controls when security events are triggered in the area. Inputs include RTUs, programmable controllers, communications infrastructure, and more.

ALARM SYSTEMS: Any 3rd party linked alarm system and control panel trigger other systems in the area when an alarm has been sounded. Operators can manually trigger system alarms or automate the process using an advanced rules engine for standard operating procedures in pre-defined situations.

SURVEILLANCE SYSTEMS: Integrate base surveillance systems into our Force Protect to provide a common operating picture to detect and locate threats quickly.

ACCESS CONTROL SYSTEMS: Linked access control systems alert operators to unauthorised access attempts. Using an advanced rules engine, they immediately and automatically activate other systems around the access point to provide operators with additional relevant data.

COMPUTER AND IT SYSTEMS: Integrate all physical and virtual IT systems to facilitate rapid access to information across infrastructure and device ecosystems including IT networks, network storage, and computer processing and security layers.

COMMUNICATIONS SYSTEMS: Integrate all communications networks, applications, and devices to visualise resources and personnel in a common operating picture and disseminate information to teams in real-time.

For more information: **MotorolaSolutions.com/ForceProtect**

HELPING PEOPLE BE THEIR BEST
IN THE MOMENTS THAT MATTER.

MOTOROLA SOLUTIONS