



# Megapixel Video Management Solutions

Empowering Megapixel Video Surveillance



# Simple, Reliable, Powerful Megapixel Video Solutions

### Proven Reliable

Each Surveon product combines proven software, firmware, circuit, tooling, integration, and validation abilities with ISO9001/14001 certified production capabilities to provide our partners with a reliable, solid solutions, backed with Surveon's 3 year warranty.

- 3-Year Warranty
- In-house Design
- ISO9001/14001 Production
- Industrial-Grade Components

### Enterprise Level

Surveon enterprise-grade Video Management Software is built on a client-server architecture, providing intuitive live monitoring modes and smart investigation modes, with real-time VI detection, HTML, multi-display support, advanced eMAPs and a centralized management framework.



Complete Lineup

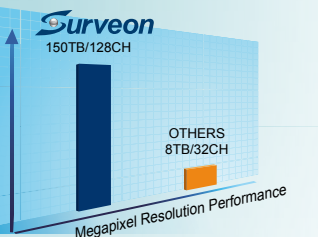


### Complete Lineup

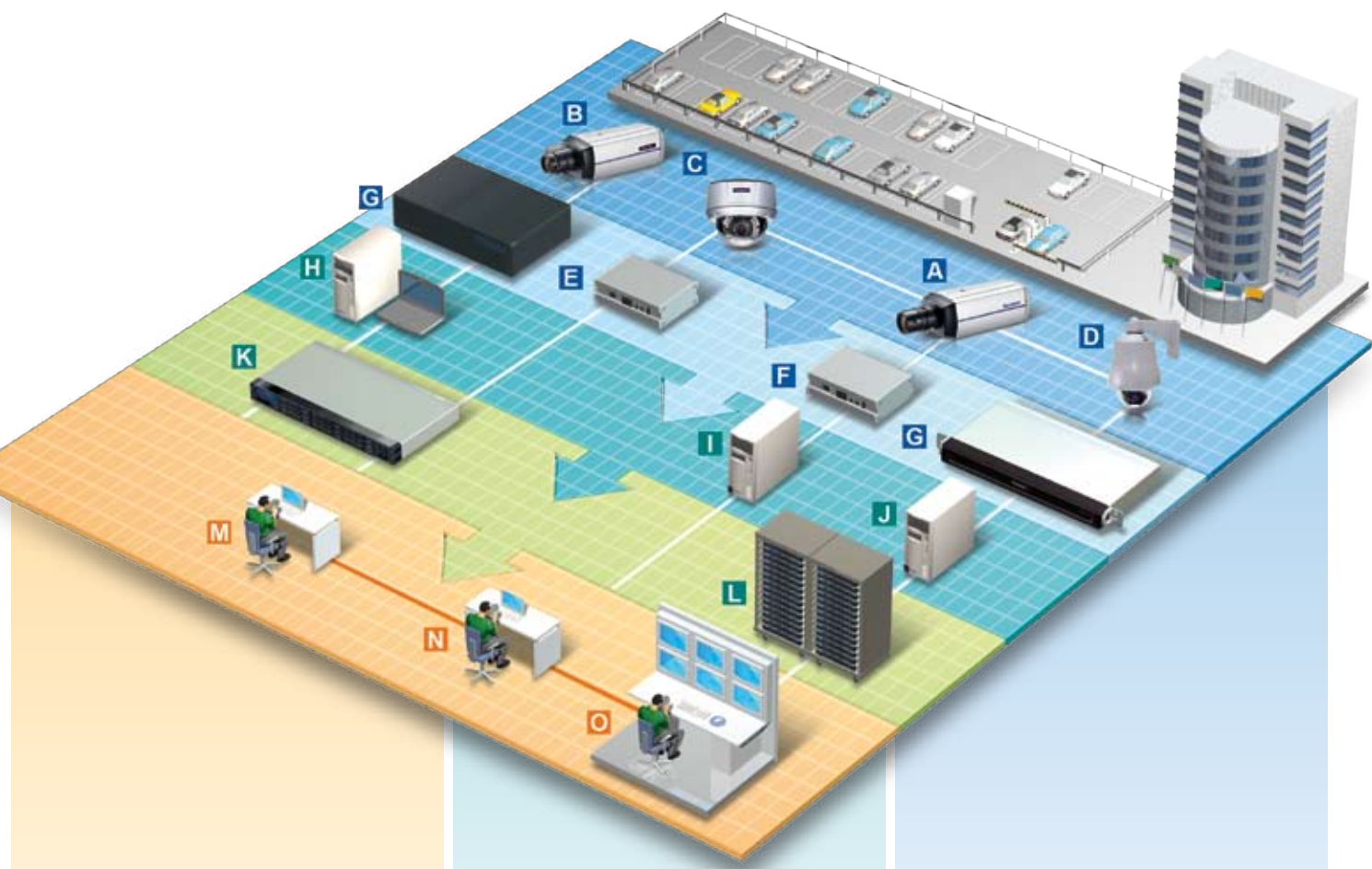
Surveon provides products for every aspect of video surveillance lineup, including a full line of D1 to megapixel cameras with day/night, WDR, wide-temperature and weatherproof IP66 models; professional-grade RAID capable NVRs; award-winning RAID storage solutions; and enterprise-level video management software.

### Megapixel Optimized

Surveon VMS optimizations include Surveon File System (SFS)—with twice the I/O performance of standard NTFS, pre-integration with our Enterprise RAID solutions—with unified configuration and no installation requirements. These optimizations reduce frame losses and hard drive failures.



### Surveon End-to-End IP Video Solutions Framework



### Video Management

- M Control Center
- N VMS Client
- O TV-Wall Client

### Video Streaming & Storage

- H VMS Server + Local Client
- I CMS Server
- J Video Intelligence Server
- K Direct Video Storage
- L ISCSI Video Storage

### Surveon IP Video Device

- A Analog Cameras
- B IP Cameras
- C Megapixel Cameras
- D PTZ Cameras
- E F Video Server
- G Hybrid NVR

### About Surveon Technology Inc.

Surveon Technology offers end-to-end network video surveillance solutions that showcase our expertise in professional camera design, high-availability video storage, embedded firmware and video management software. All Surveon products are designed in-house and manufactured on our ISO 9001 and ISO 14001 certified production site to ensure the highest quality for our partners. For more information about Surveon, please visit our website at [www.surveon.com](http://www.surveon.com)



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# Effective IP Video Surveillance Management

Surveon's Video Management Software, which is pre-installed on every Surveon NVR, is the foundational piece of our end-to-end IP video solutions, linking Surveon's full line of IP cameras and major 3rd party cameras with our megapixel video recording and management technology to deliver highly integrated and reliable solutions. Surveon VMS provides users intuitive and powerful monitoring and investigative tools to increase security coverage and responsiveness, providing an active security solution as well as increased security management efficiency. Our distributed client-server architecture is scalable for projects ranging from single store, simple site applications to multi-site network video management and centralized, clustered solutions, empowering our partners by providing them with solutions that will grow with their future deployment needs.



**Intuitive Management UI**

User-friendly Interface including Camera Pool, VI Panel, Alarm Panel, and View Management areas.

**Smart Search Interface**

Date/Time Search, VI Search and Multi-event Search modes increase investigative effectiveness and efficiency.

**Central Management Solutions**

Central Management Solutions - Multi-NVR, Multi-Camera management through Surveon CMS Architecture

**Advanced eMAP**

Easy, flexible multi-level, multi-area capable eMapping capabilities.

**Real-Time Video Analytics**

VI functions including Missing, Foreign Object, Intrusion Detection, Forbidden Area and Virtual Wall.

**Multiple Display**

Supports up to 8 screens for advanced monitoring in security projects.

**Web & HTML Integration**

Allows simple integration of web or HTML based custom applications in live-view screen.

**Accurate Live Monitoring**

Featuring Multi-View Control, Instant Playback, and VI Playback for accurate surveillance assessments.

- Monitoring**
- Automated discovery of supported network cameras
  - 4:3 & 16:9 views, supports versatile screen division layouts
  - HTML and image overlays
  - View patrolling, spot monitoring
  - Real-time VI alarm display
  - Instant playback in normal and alarm view
  - Video clip bookmarking
  - Video privacy mask
  - PTZ functionality with digital zoom

- Multiple Displays**
- Up to 8 monitors
  - Supports live view, playback, eMap & HTML
  - Direct display to secondary monitor(s)

- eMAP**
- Hierarchical maps with camera direction display
  - Real-time event alerts

- Investigation**
- Date-Time search
  - Pre-defined recent time search
  - VI analytics search
  - Multiple event search
- Recording**
- 24/7 continuous recording
  - Scheduled recording for single or multiple cameras
  - Rule-based alarm triggered recording
  - Up to 45 minutes pre/post alarm recording

- Real-Time VI Detection**
- Intelligent general motion, object, intrusion and tampering detection
  - Virtual fence and object counting\*

- Alarm & Rule Manager**
- Configurable actions: video alarm panel, event alarm panel display, recording, logging, notifications
  - Versatile notification mechanisms: email, FTP, SMS, phone, sound, alarm triggered via digital output, round-the-clock alert
- Hybrid Solution**
- Integrated with 16CH H.264 capture card for analog cameras\* while retaining megapixel IP camera support.

- CMS**
- Unlimited NVR server and IP camera management
  - H.264, MPEG-4, MJPEG Codec support
  - Supports simultaneous live view of cameras from multiple NVRs
  - PTZ functionality with digital zoom
  - Advanced cross-NVR eMaps
  - Smart search over multiple NVRs
  - Video & message-based alarms from multiple NVR Servers

- Miscellaneous**
- H.264, MPEG-4, MJPEG Codec support
  - Standalone and web\* clients for local and remote monitoring and management
  - Digital I/O management
  - Surveon File System Technology optimized recording\*
  - Digital watermark proofing\*

**3rd Party IPCAM Support**

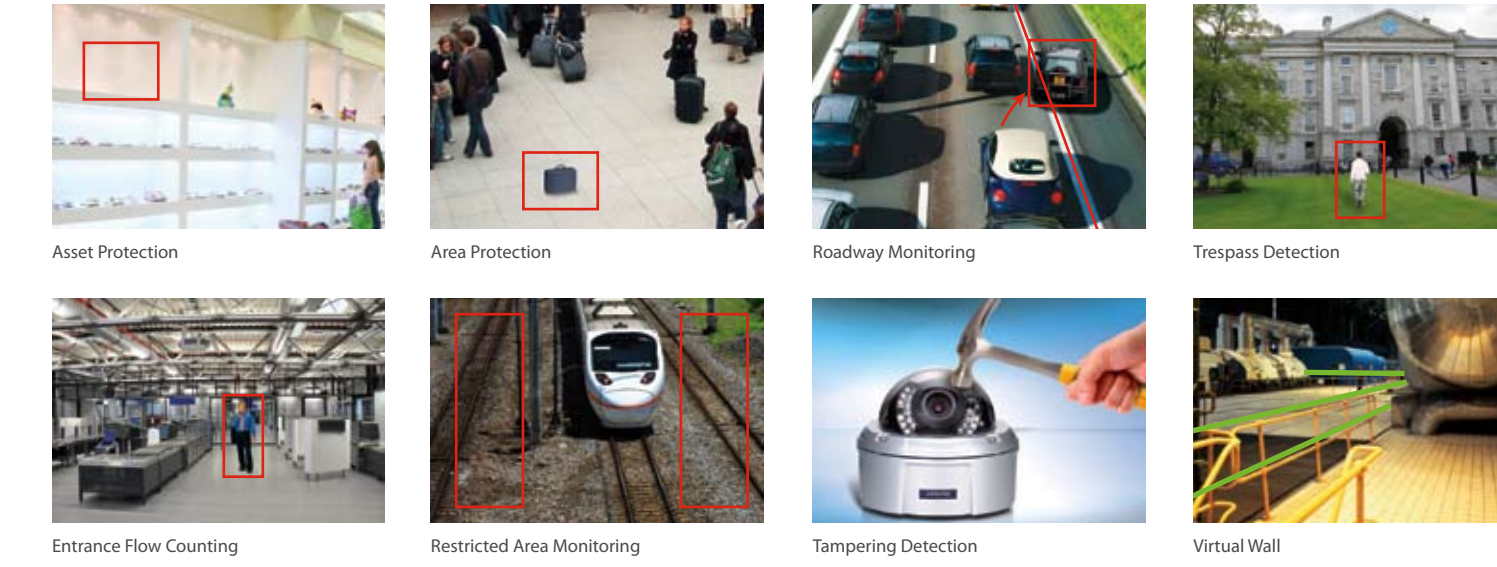
Over 300 models including ACTi, Arecont Vision, Asoni, AVTech, AXIS, D-Link, IQinVision, Mobotix, Panasonic, Sony, Vivotek, and Zavio models.

\* Available in VMS 2.4.5

# Surveon Video Analytics

Surveon VMS includes our integrated Video Intelligence Server, which enables real-time analysis of video streams. VI Server allows operators to quickly identify security events and set up intelligent alerts for handling these events, allowing for efficient and effective monitoring of multiple video sources.

- Multiple Detection Functions:**
- The Surveon VI suite features a comprehensive range of VI functions, including



Each capture device can be configured with any combination of VI functions, with separate trigger responses and notifications, providing a comprehensive security net for multi-camera monitoring.

# Scalable Video Appliances

Surveon NVRs are dedicated video appliances featuring the Surveon VMS, giving our partners a reliable and efficient platform for megapixel video recording. With scalable hardware and enterprise RAID architecture, Surveon NVRs can support 4 to 200 channels on unified hardware while easing the installation and configuration overheads for our partners.

- Simple Installation, Straightforward Configuration**
- Surveon NVRs are pre-configured with our enterprise-level VMS Suite, with no need for complex setup processes. When using Surveon camera and storage solutions, users of Surveon NVRs also gain the advantage of unified configuration and management through the VMS interface.

- Highly Integrated Enterprise Video Storage**
- To address the storage demands associated with megapixel video, Surveon NVRs are pre-integrated with our award-winning enterprise storage solutions, reducing the complex configuration and installation requirements of typical enterprise-grade storage schemes. This approach gives integrators ease of use and reliability that cannot be matched by COTS RAID solutions.

- Reliable Designs, Proven Production**
- Surveon maintains rigorous quality assurance processes from design validation to production, covering full thermal, mechanical, and electrical tests, as well as 200 hours of integration testing for each NVR, IP camera, and storage solution. Furthermore, 24-48 hours standard burn-in testing ensure the delivery quality of every Surveon NVR. These steps reduce failure rates inherent in 24/7/365 operations, and are backed with our 3 year warranty.



**Surveon NVR vs Common COTS Solutions**

	Surveon Video Storage Appliance	COTS Solutions Server + RAID Card	Standard PC
Data Protection	Hardware RAID	HW/SW RAID	No
Validation for Video Surveillance	Yes	Limited	No
Storage Configuration	Simple VMS Based	Complicated Application	Limited Configurability
Design & Manufacturing	100% In-house	COTS Barebone	No
Enterprise Design (Cable Free, All Module Design, Thermal Proven)	Yes	No	No
Optimized Firmware for Megapixel Recording	Yes	No	No
Total Cost of Ownership	Low	High	High

**NVR Selection Table**

Maximum Simplicity

Model Name	SMR2008	SMR3016	SMR5032	VMS Enterprise Solution Package
Product Description	2 Bay, Smart H/W RAID NVR	5 Bay, Smart H/W RAID NVR	8 Bay, Smart H/W RAID NVR	VMS SW License + SAS Storage
Max. Channels	8 CH Megapixel	16 CH Megapixel	32 CH Megapixel	32 Channels
Architecture	Client Server			
Max. Storage Capacity (TB)	4	10	16	16
Recording Day *	7+ Days@ 8 CH Megapixel	14+ Days@ 16 CH Megapixel	14+ Days@ 32 CH Megapixel	30 Days@ 20 CH Megapixel, 14 Days@ 32 CH Megapixel
Form Factor	Desktop, Cube	Desktop, Cube	Desktop, Cube	NA
Hardware RAID	Yes			
Video Management Solutions	VMS Enterprise 2.4 (Live View, PTZ, eMap, Playback, Video Intelligence, Megapixel Recording, 3rd Party IPCAM supported)			
Storage Integration	Integration & Installation Free (Automatic Management by Surveon VMS2.4)			
Warranty	3 Years			
Certification**	BSMI, CB, FCC / CE Class A, UL60959/ IEC 60950, CCC for power only, GOST			
Applications	Retail, SMB, Clinic, Hospitality, Community, Factory, Education			

\* Megapixel, Bit Rate=2 Mbps, 24 hr recording, RAID 1 for SMR2008 & RAID 5 for SMR3016/SMR5032  
\*\* Applicable to SMR series

Maximum Scalability

Model Name	NVR2000-Ultimate	NVR2000-24B	NVR2000-16B	NVR2000-12B
Product Description	Clustered Video Storage Solution	5U 24 BAY NVR	4U 16 BAY NVR	3U 12 BAY NVR
Architecture	Client Server			
Recording Days over Channels *	30 Days@ 100 CH Megapixel, 14 Days@ 200 CH Megapixel	30 Days@ 32 CH Megapixel, 14 Days@ 64 CH Megapixel	30 Days@ 20 CH Megapixel, 14 Days@ 40 CH Megapixel	30 Days@ 16 CH Megapixel, 14 Days@ 32 CH Megapixel
Max. Storage Capacity (TB) **	142	44	30	22
Form Factor	5U+ Rackmount	5U Rackmount	4U Rackmount	3U Rackmount
Easy Maintenance	Power, Hard Drive, FAN			
Hardware RAID	Yes (0, 1 (0+1), 5, 6, 10, 30, 50, 60) - default with RAID5			
Video Management Solutions	VMS Enterprise 2.4 (Live View, PTZ, eMap, Playback, Video Intelligence, Megapixel Recording, 3rd Party IPCAM supported)			
Storage Integration	Integration & Installation Free (Automatic Management by Surveon VMS2.4)			
Warranty	3 Years			
Certification	FCC Class A, CE, BSMI, UL60959 / IEC 60950, CCC			
Applications	Corporate, Factory, Education, Bank, City Surveillance, Government, Public Transportation			

\* Megapixel, Bit Rate=4 Mbps, 24 hr recording  
\*\* RAID Level = 5