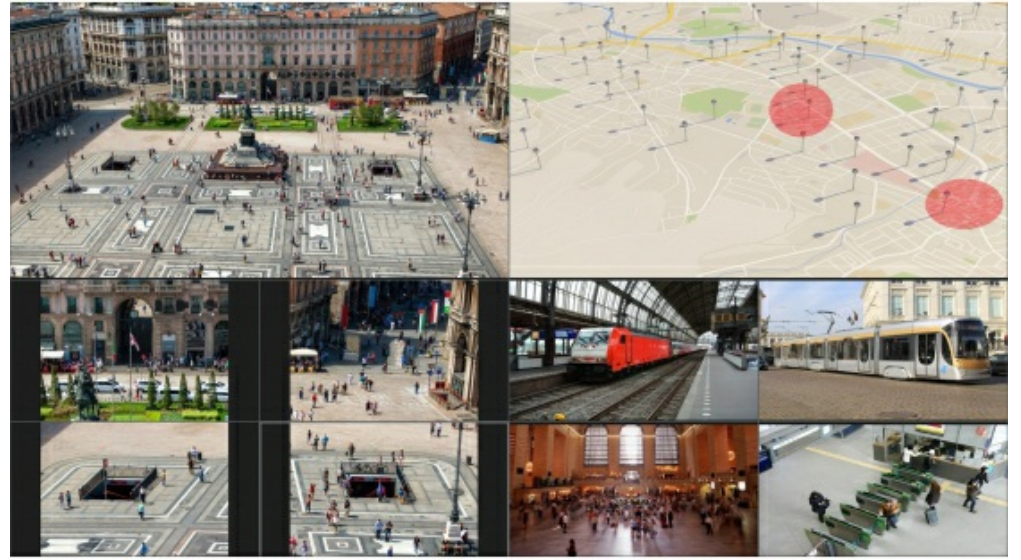


SOW-S Series



Simple, easy-to-use, network video management software for monitoring systems with up to 288 cameras

This simple, easy-to-use video management software supports monitoring systems with up to 288 cameras, which is ideal for common applications such as retails and banks.

The SOW-S Series is the first 4K-ready VMS application from Sony with 4K recording and playback capability. It's ideal for use with Sony 4K cameras, supporting unique image output functions like Intelligent Cropping. Recording 4K image data with four times the resolution of Full HD, the SOW-S Series supports more effective, efficient video monitoring by providing excellent situational awareness plus the ability to recognise fine details in a scene and quick, accurate searches.

Multiple users can simultaneously and securely access live or recorded video via their smartphone or tablet from any location. In addition remote PC clients can securely access system functions via a web browser, with no need to install application software.

Multi-vendor support allows easy expansion through the addition of a growing choice of third party cameras and other devices to create a powerful, versatile monitoring system. Regular software updates give monitoring professionals the reassurance of top-flight performance and the addition of new features to expand system capabilities even further.

Monitoring workflow is enhanced with support for a wide range of smart analytical and automation functions. This software-based solution gives system designers and integrators the freedom to select server hardware from the marketplace with CPU and operational specifications to meet their customers' precise needs.

Note

The SOW-S and SOW-E Series network video management software and HAW-S and HAW-E Series network video recorders are not compatible with each other and cannot be used in the same system.

Compatible with Sony 4K cameras

Sony 4K cameras provide powerful new ways to get the whole picture, allowing detailed analysis of specific areas in a scene, together with a wide-area situational overview. They offer a range of video output functions, including Intelligent Cropping and Multi Tracking, plus Evidence Shot, high resolution still image capture that's ideal

for evidence. The SOW-S Series supports the video output functions unique to Sony 4K cameras, including a single real-time 4K/30 fps video stream and Intelligent Cropping that provides a Full HD overview video plus up to four VGA close-up video streams at the same time.

Multi-client access via smartphone or PC

Multiple users can simultaneously and securely access live or recorded video via their smartphone or tablet from any location. In addition remote PC clients can securely access system functions via a web browser*, with no need to install application software. Live images captured with a smartphone or tablet by on-site staff can be transferred to the system, shared among users in the operations room and recorded to the central server. This supports timely monitoring of events, even in extreme environments where installing cameras is difficult.

* Web browser supports limited functions, while client application software installed on a PC supports full system functions.

See the complete picture

Multiple monitors can be easily controlled by a single operator. The monitors are allocated to different tasks - such as viewing cameras images, a site map or alarm list - giving a single operator a complete overview and status of the entire system.

All-round awareness

Interactive, multi-layered maps offer a situational overview plus control of cameras and other integrated systems. Icons are displayed in a map image showing the location of each camera: operators can instantly view live video by clicking on an icon. When an alarm event occurs, the associated camera icon is displayed prominently, helping the operator understand the situation and take appropriate action.

System components (software modules)

Recording Server	Yes
Number of connected cameras per system	288
Maximum number of cameras per recording server	32
Recording Server manager	Yes
Management Application (local management)	Yes
Event Server (for handling of events and alarms)	Yes
NVMS Mobile Client	Yes
Network Video Management System Smart Client	Yes
Network Video Management System Web Client	Yes
Network Video Management System Smart Client - Player	Yes

(local playback/export)

Device support

Support for ONVIF™ compliant devices	Yes
Generic device support via universal driver	Yes
Number of IP device brands supported via dedicated device integration	152
Number of supported IP camera models	5.136
Number of supported video encoder models	363
Number of dedicated IP input/output models	14
Number of supported DVRs	75
Number of supported IP audio devices	10
Number of supported perimeter detectors	18
Secure HTTPS camera connectivity (on supported devices)	Yes

Video processing

H.264, MJPEG, MPEG-4, MPEG-4 ASP and MxPEG support	Yes
Dual stream (live and recording) per camera	Yes
Client video stream down sampling (resolution and FPS) option	Yes
Send camera pre-alarm images (pre-recording buffer) to recording server	Yes
Video recording speed up on motion, event or time schedule	Yes
Built-in Video Motion Detection (VMD)	Yes
Auto adjustable VMD sensitivity	Yes

Motion metadata generated during VMD analysis	Yes
VMD exclusion zones	Yes
Video motion detections per server	All connected cameras

Audio

One-way audio support	Yes
Two-way audio support	Yes
One-way audio recording	Yes
Maximum number of supported audio channels	32

Pan-tilt-zoom (PTZ)

Preset positions per camera	25
Go-to preset on event	Yes
Preset patrolling	Yes
Combine patrolling and go-to preset on event	Yes
Number of PTZ priority levels for prioritized PTZ control	1

I/O and events

Hardware configurable events (such as I/O input, motion, tampering, temperature, communication failure)	Yes
Motion detection events (VMD in Recording Server)	Yes
System error events (for example disk full)	Yes
Manual / User defined events	Yes
Event-based notification	Yes
Event-based output control	Yes
Event-based device start/stop	Yes

Alarm Manager

View triggered alarms	Yes
Number of alarm priority levels	32000

Customizable alarm priority levels	Yes
Customizable alarm categories	Yes
Alarm handling reporting	Yes
Alarm logging	Yes
Redundancy option for high availability	Yes
Video retention time	
Video retention time	Unlimited
Recording capacity per device/day	>1 TB
Archiving of recordings	Yes
Archiving to network drives	Yes
Dynamic archiving (disk spanning)	Yes
Online access to archives	Yes
Archiving schedules	Hourly
Automatic storage distribution	Yes
Storage definition and retention time per device	Yes
Storage overview (used vs. available space) of available storage drives	Yes
Support for Add-on products	
Supports Screen Recorder	will be supported
Supports ONVIF Bridge	Yes
Management	
Automatic initial configuration wizard	Yes
Configuration wizards for aided system setup	Yes
Automatic camera discovery	Yes
Device scanning with device model detection	Yes

On-the-fly configuration changes	Yes
Run servers as Windows Services	Yes
Scheduled start/stop of devices	Yes
System configuration restore points	Yes
Export and import of configuration data	Yes
Offline license activation	Yes

Viewing clients

Maximum number of clients	20
Customizable access port with NAT support	Yes
Single step installer (installs Smart Client together with server)	Yes

System alarms and notification

Email notification	Yes
SMS notification	Yes

User authentication and rights management

Basic User (XProtect application accounts)	Yes
Windows User (local Windows accounts)	Yes
Dual authorization (Smart Client users)	Yes

Logging

System logging	Yes
Event logging	Yes
Audit logging	Yes

Languages (Management Interface)

English	Yes
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French	Yes
German	Yes
Japanese	Yes
Spanish	Yes

General view handling (Client)

Number of view layouts	2 (Mobile/Web Client), 41 (Smart Client)
Maximum view Items per view	100 (Smart/Web/Mobile Client)
Optimized view layouts for 4:3 and 16:9 display ratios	Yes (Smart Client)
Corridor optimized view layouts	Yes (Smart Client)
Optimized view layouts for landscape and portrait displays	Yes (Smart/Mobile Client)
Cameras from multiple servers	Yes (Smart/Web/Mobile Client)
Support for Shared Views and Private Views	Yes (Smart/Web/Mobile Client)
Images in views	Yes (Smart Client)
Active HTML pages in views	Yes (Smart Client)
Hotspot in views	Yes (Smart Client)
Carousel in views (controllable)	Yes (Smart Client)
Full screen mode	Yes (Smart/Web/Mobile Client)
Display views as floating window	Yes (Smart Client)
Display views on multiple monitors	Yes (Smart Client)
Advanced multi window support with synchronized or independent operation	Yes (Smart Client)
Switch to view by number	Yes (Smart Client)
Initial default view	Yes (Smart/Web/Mobile Client)
Camera search	Yes (Smart/Web/Mobile Client)
Automatic restore views and windows at login	Yes (Smart/Web/Mobile Client)

Live view (Client)

Update on motion only	Yes (Smart Client)
One-way audio support	Yes (Smart Client)
Two-way audio support	Yes (Smart Client)
Start recording in view	Yes (Smart Client)
Independent playback in live mode	Yes (Smart Client)
Replace cameras in view without changing view setup	Yes (Smart Client)
Share video image	Yes (Smart/Mobile Client)
Switch to camera by number	Yes (Smart Client)

PTZ support (Client)

Define presets in the client application	Yes (Smart Client)
View who have PTZ control and time to automatic release	Yes (Smart/Web/Mobile Client)
Go to preset position	Yes (Smart/Web/Mobile Client)
Pause patrolling at manual operation	Yes (Smart/Web/Mobile Client)
Grandeye 360° Quad View	Yes (Smart Client)
Immervision Enables® panomorph lens support	Yes (Smart Client)
Joystick support	Yes (Smart Client)
Assign commands to keyboard shortcuts and joystick buttons	Yes (Smart Client)
Auxiliary commands (wash and wipe)	Yes (Smart Client)

I/O and events control (Client)

Camera overlay buttons	Yes (Smart Client)
Manually activate events and trigger outputs	Yes (Smart/Web/Mobile Client)

Playback (Client)

Maximum view items per view	1 (Mobile/Web Client), 100 (Smart Client)
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Playback mode	Multi Camera(Smart/Web Client), Single Camera(Mobile Client)
Recording search	Yes (Smart/Web/Mobile Client)
Recent history of recording sequences per camera	Yes (Mobile Client)
Time/date search	Yes (Smart/Web/Mobile Client)
Independent playback in playback mode	Yes (Smart Client)
Event/alert list in recording	Yes (Smart Client)
Graphical timeline	Yes (Smart Client)
Adjust playback speed	Yes (Smart/Web/Mobile Client)
Single frame step (forward/backward)	Yes (Smart/Web/Mobile Client)
One-way audio support	Yes (Smart Client)
Digital zoom	Yes (Smart/Web/Mobile Client)
Share video image	Yes (Smart/Web/Mobile Client)
Print report with comments	Yes (Smart Client)
Privacy masking	Yes (Smart/Web/Mobile Client)

Smart Search (Client)

Smart Search based on VMD analysis	Yes (Smart Client)
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Sequence Explorer (Client)

Listing of sequences	Yes (Smart Client)
Listing of time intervals	Yes (Smart Client)
Dedicated Sequence Explorer tab that can be displayed as floating window	Yes (Smart Client)

Alarm Manager (Client)

Alarm list and alarm preview view items in normal camera views	Yes (Smart Client)
Sort and filtering functions	Yes (Smart Client)
Instant preview of primary and related cameras	Yes (Smart Client)

Map function (Client)

Standard graphical file formats supported for maps	Yes (Smart Client)
Number of linked map layers supported	64 (Smart Client)
Video preview	Yes (Smart Client)
Integrated control of speakers, microphones and I/O devices	Yes (Smart Client)
Drag-and-drop and point-and-click definition of map elements	Yes (Smart Client)
Integrated PTZ control	Yes (Smart Client)
Real-time system integrity overview and system performance	Yes (Smart Client)

Export (Client)

Export in still image format (JPEG)	Yes (Smart/Web/Mobile Client)
Export in media player format (AVI)	Yes (Smart/Web/Mobile Client)
Export with audio in media player format (AVI)	Yes (Smart Client)
Export with audio in media player format (MKV)	Yes (Smart Client)
Export in Network Video Management System format	Yes (Smart Client)
Server side export	Yes (Smart/Web Client)
Encrypted export with password	Yes (Smart Client)
Digital signing of exported video	Yes (Smart Client)
Re-export prevention	Yes (Smart Client)
Auto-export of Smart Client - Player	Yes (Smart Client)
Preserve system defined privacy masks	Yes (Smart/Web/Mobile Client)
Additional export specific privacy masks	Yes (Smart Client)
Direct export to optical	

media	Yes (Smart Client)
Flexible camera selection for export	Yes (Smart Client)
Bulk export to multiple media formats	Yes (Smart Client)
General and camera specific export comments	Yes (Smart Client)
Pre/post comment slides (media player format only)	Yes (Smart Client)
Verification of digital video signatures in Smart Client - Player	Yes (Smart Client)
Video Push (Client)	
Video Push	Yes (Mobile Client)
Installation (Client)	
Run without installation	Yes (Web Client)
Optional browser plug-ins for enhance viewing performance	Yes (Web Client)
Single step installer (installs client together with server)	Yes (Smart Client)
Initial and update installations from Management Server	Yes (Smart Client)
System access (Client)	
Auto-login	Yes (Smart/Mobile Client)
Secure (HTTPS) client-server connection	Yes (Mobile/Web Client)
Dynamic bandwidth adaptation	Yes (Mobile/Web Client)
Bandwidth threshold	Yes (Mobile/Web Client)
Authorization (Client)	
Restrict user access by devices (cameras, microphones, I/O devices, etc.)	Yes (Smart/Web/Mobile Client)
Restrict access to live view	Yes (Smart/Web/Mobile Client)

Restrict access to PTZ	Yes (Smart/Web/Mobile Client)
Restrict access to playback	Yes (Smart/Web/Mobile Client)
Restrict access to export	Yes (Smart/Web/Mobile Client)
Restrict access to setup	Yes (Smart Client)

Personalization (Client)

Application options	Yes (Smart/Mobile Client)
Centralized management of application options	Yes (Smart/Web Client)
Application theme support	Yes (Smart Client)
Task oriented tabs	Yes (Smart Client)
Toggle between Advanced mode and Simplified mode. Default mode: A - Advanced, S - Simplified	Yes (Smart Client)

System (Client)

Hardware accelerated video decoding (Intel Quick Sync video)	Yes (Smart Client)
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Languages (Installation, UI and help function) (Client)

Arabic	Yes (Smart/Web/Mobile Client)
English	Yes (Smart/Web/Mobile Client)
French	Yes (Smart/Web/Mobile Client)
German	Yes (Smart/Web/Mobile Client)
Japanese	Yes (Smart/Web/Mobile Client)
Spanish	Yes (Smart/Web/Mobile Client)
Turkish	Yes (Smart/Web/Mobile Client)

Computer running Standard Edition Products (System Requirements)

CPU	Intel® Pentium® 4, 2.4 GHz
RAM	Minimum 4 GB
Network	Ethernet 100 Mbit
Graphics adapter	AGP or PCI-Express, minimum 1024 x 768, 16-bit colors

Hard disk space	Minimum 10 GB free hard disk space available, excluding space needed for recordings
Operating system	Microsoft® Windows® 10 Pro (64 bit)* Microsoft Windows 10 Enterprise (64 bit)* Microsoft Windows 8.1 Pro (64-bit) Microsoft Windows 8 Enterprise (64-bit) Microsoft Windows 8 Pro (64-bit) Microsoft Windows 7 Ultimate (64-bit) Microsoft Windows 7 Enterprise (64-bit) Microsoft Windows 7 Professional (64-bit) Microsoft Windows Server 2012 (64-bit): Standard and Datacenter Microsoft Windows Server 2012 R2 (64 bit): Standard and Datacenter Microsoft Windows 2008 R2 (64-bit): Standard, Web, High Performance Computing (HPC), Enterprise and Datacenter
Software	Microsoft .NET 4.5.1 Framework DirectX 9.0 or newer Windows Installer 4.5

Computer running Mobile Server (System Requirements)

CPU	Intel® Pentium® 4, 2.4 GHz
RAM	Minimum 4 GB
Network	Ethernet 100 Mbit
Graphics Adapter	Onboard GFX, AGP, or PCI-Express, minimum 1024 x 768, 16-bit color
Hard Disk Space	Minimum 10 GB free hard disk space available (When using server-side export additional storage space is needed)
Operating system	Microsoft® Windows® 10 Pro (64 bit)* Microsoft Windows 10 Enterprise (64 bit)* Microsoft Windows 8 Pro (64 bit) Microsoft Windows 8.1 Enterprise (64 bit) Microsoft Windows 8.1 Pro (64 bit) Microsoft Windows 7 Ultimate (64 bit) Microsoft Windows 7 Enterprise (64 bit) Microsoft Windows 7 Professional (64 bit) Microsoft Windows Server 2012 (64 bit): Standard and Datacenter Microsoft Windows Server 2012 R2 (64 bit): Standard and Datacenter Microsoft Windows Server 2008 R2 (64 bit): Standard, Web, High Performance Computing (HPC), Enterprise, and Datacenter
Software	Microsoft® .NET 4.5.1 Framework

Computer running Smart Client, Smart Client - Player and Smart Wall - Using Software Decoding (System Requirements)

CPU	Intel® Core™ 2 Duo
RAM	Minimum 1 GB
Network	Ethernet 100 Mbit
Graphics Adapter	Onboard GFX, AGP or PCI-Express, minimum 1280 x 1024, 16-bit colors, DirectX 9.0 or newer
Hard Disk Space	1 GB free
Operating system	Microsoft® Windows® 7 Professional SP1 (32-bit or 64-bit) * Microsoft® Windows® 7 Enterprise SP1 (32-bit or 64-bit) * Microsoft® Windows® 7 Ultimate SP1 (32-bit or 64-bit) * Microsoft® Windows® 8 Pro (32-bit or 64-bit) Microsoft® Windows® 8 Enterprise (32-bit or 64-bit) Microsoft® Windows® 8.1 Pro (32-bit or 64-bit) Microsoft® Windows® 8.1 Enterprise (32-bit or 64-bit) Microsoft® Windows® 10 Pro (32-bit or 64-bit) Microsoft® Windows® 10 Enterprise (32-bit or 64-bit)
Operating system (contd)	Microsoft® Windows® Server 2008 R2 (32-bit or 64-bit): Standard, Web, High Performance Computing (HPC), Enterprise, and Datacenter Microsoft® Windows® Server 2012 (32-bit or 64-bit): Standard and Datacenter Microsoft® Windows® Server 2012 R2 (32-bit or 64-bit): Standard and Datacenter Microsoft® Windows® 7 and Server 2008 R2 are only supported on physical PC's not on virtual machines
Software	Microsoft® .Net 4.5.1 Framework Requires Operating System and Graphic Adaptor support for DirectX 9.0 or newer

Computer running Smart Client, Smart Client - Player and Smart Wall - Using Hardware (System Requirements)

CPU	Intel CPU supporting Intel QuickSync, Intel GPU enabled in BIOS
RAM	Minimum 1 GB

Network	Ethernet 100 Mbit
Graphics Adapter	AGP or PCI-Express, minimum 1280 x 1024, 32-bit colors, DirectX 11.0 or newer
Hard Disk Space	1 GB free
Operating system	Microsoft® Windows® 8.1 Pro (32-bit or 64-bit) Microsoft® Windows® 8.1 Enterprise (32-bit or 64-bit) Microsoft® Windows® 10 Pro (32-bit or 64-bit) Microsoft® Windows® 10 Enterprise (32-bit or 64-bit) Microsoft® Windows® Server 2012 (32-bit or 64-bit): Standard and Datacenter Microsoft® Windows® Server 2012 R2 (32-bit or 64-bit): Standard and Datacenter
Software	Microsoft® .Net 4.5.1 Framework Requires Operating System and Graphic Adaptor support for DirectX 11.0 or newer

Computer running Web Client (System Requirements)

CPU	Intel Core2 Duo, 2.0 GHz Intel Core i3-5010U 2.1 Ghz*
RAM	1 GB 4 GB*
Network	Ethernet 100Mbit / WiFi 2Mbit
Graphics Adapter	AGP or PCI-Express, minimum 1280 x 1024, 16 bit colors
Hard Disk Space	500 MB free
Operating System	Any capable of running the below browsers
Browser	Microsoft Internet Explorer® 9 or later** Safari® 5 or later** Google Chrome™ 16 or later Google Chrome™ 48 or later (recommended)* Mozilla® Firefox® 11 or later Mozilla® Firefox® 43 or later (recommended)*

Device running Mobile Client (System Requirements)

RAM	2GB*
Operating System	Android 5.0 or higher iOS 9.2 or higher
Network	2G/3G (4G or WiFi)*

Notes

*	Required for using Direct Streaming
**	Not supported when using Direct Streaming

