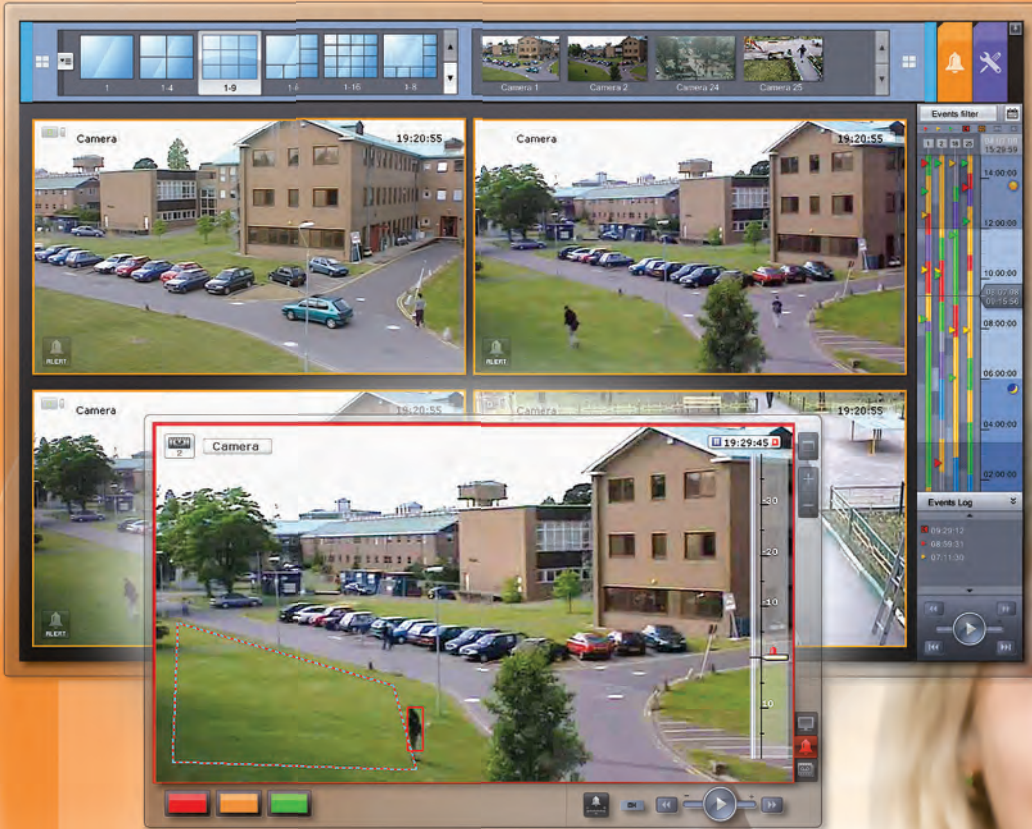




an effective video management software
for small to medium-sized systems



#1 in Europe



1 Axxon Smart Pro 2.0 supports ONVIF and more than 150 different models of IP cameras and IP video servers. The system is easily configured and conveniently managed.

2 10 video analytics and 3 audio analytics types enable automatic tracking of the most diverse alarm situations.

Axxon Smart Pro 2.0 an effective solution for small to medium-sized systems

Axxon Smart Pro 2.0 is a professional video surveillance system for small-scale deployments such as gas stations, hotels, auto servicing centers, stores, parking areas or houses. The system can link up to 4 video servers, each with 64 cameras, making a total of 256 cameras. Five client workstations can be connected to each video server.

Axxon Smart Pro 2.0 sets a new standard for functionality. With its innovative user interface, state-of-the-art video analytics, event response configuration capabilities, role-driven multi-user access, as well as support for a multitude of IP devices and capability to create separate video archives for different alarm types with individual recording settings, Axxon Smart Pro 2.0 provides an unprecedented range of features.

ONVIF compatible

Axxon Smart Pro 2.0 supports analog and IP cameras. It comes with seamless integration for more than 150 different models of IP cameras and IP video servers from the market's principle leading manufacturers. For even more compatibility the ONVIF protocol is supported. Axxon is a contributing member of the ONVIF global open standards industry forum.

Axxon is always expanding the list of integrations. New integrations come as separate Driver Pack module with its own installer. This enables to add support for newly integrated equipment without reinstalling the entire software.

Axxon Smart Pro 2.0 also supports all popular IP compression formats, including MPEG-4, H.264, and MJPEG.

Display H.264 images avoiding performance drop

Axxon Smart Pro 2.0 supports H.264 video stream decoding using a graphics card. For this purpose, Axxon Smart Pro 2.0 employs Nvidia CUDA parallel computing technology, that is implemented in most current video cards based on Nvidia chipsets. CUDA enables a significant increase in video system performance while reducing the load on the CPU.

User friendly

AxxonSoft specialists have analyzed the most usual situations during daily operation of a video surveillance system and have designed optimal user interface to deal with. This concept has been implemented in a unique OpenGL-based interface for which every detail was well thought-through to give the user maximum convenience and on-the-fly control. To provide convenient configuration automated device discovery is supported. And for PTZ control convenient, analog-like virtual joystick is employed.

Built-in video analytics

Video analysis tools help to optimize operator actions. They recognize alarm situations and draw attention to important events. This eliminates the need for the operator to constantly analyze information coming from a multitude of cameras.



3 The new alarm handling mode prevents any important events from going unnoticed.



4 The innovative user interface with touch screen monitor support makes the system even more convenient to operate.

Axon Smart Pro 2.0 supports embedded video analytics for cameras and has its own video analysis algorithms that includes 10 types of detection:

- motion
- background change
- loss of video signal
- drop of video quality
- abandoned object
- cross line
- movement in a restricted area
- stopping in a restricted area
- loitering
- zone entry
- zone exit

The product also implements three types of audio detection:

- audio trigger – reacts to a sudden change in the noise level in a certain direction
- noise detection – reacts when a certain noise threshold is exceeded
- silence detection – reacts when the noise level drops below a certain threshold (or connection with microphone is lost)

Response scenarios

The video analysis functions are enhanced by automatic system response scenarios. A video, audio or sensor event can trigger one or a combination of the following responses:

- initiate recording of video and audio from a camera
- send SMS notification to one or several subscribers
- send email notification to one or several addresses
- play an audio message
- send a signal to an actuating device (relay) connected to a camera
- move a PTZ camera to a pre-set position
- change to alarm handling mode

Alarm handling mode

This function implements a new, interactive approach to working with a video surveillance system. When an alarm event occurs, a notification is sent to the operator. Then the operator must assess the event's level of importance (or potential hazard) on a three-level scale. All registered alarms are visually displayed on a timeline where they can be organized by importance and thus video records corresponding to the alarm events can be easily found.

This alarm handling mechanism enables not only more convenient control of a facility but also control over the action of operators when securing that facility thereby significantly reducing the percentage of neglected alarm events.

Unfragmented video archiving

Video recording utilizes a specialized file system that completely eliminates the problem of fragmentation. Loop recording is employed to write monolithic archive files to disk (reformatting of disks is not required). Thanks to this, video recording speed approaches the theoretical maximum speed for recording to hard disk and does not deteriorate over time due to file fragmentation.

For each camera, the user is able to not only assign recording parameters but also specify the write location (archive file). Recordings initiated by different events can be written to separate archives. Thus, a separate, large-volume archive can be created for important events like alarms. When employing loop recording, alarm events can only be overwritten by other important alarm events and not by everyday recordings that may not contain any important information.

This flexible approach to archive creation and the special file system enable significant disk space savings, quicker access to archive files and reduced wear on disk drives.

Specifications

Purpose	Professional IP-based video surveillance system
Application	Small to medium-sized installations
Interface language	English, Russian
Supported operating systems	Windows OS family, 32-bit and 64-bit: XP, Vista, Server 2003, Server 2008, Windows 7 (analog cameras are not supported in 64-bit systems)
Max. number of servers	4
Max. number of video channels per server	64
Total number of video channels in a system	256
Number of audio channels	Equal to the number of video channels
Support for analog cameras	Yes
Support for IP equipment	More than 150 models of IP cameras and IP video servers. The list is constantly being expanded. Support for new equipment is added to the system by installing Drivers Pack.
Video compression algorithms	MJPEG, MPEG-4, H.264
Hardware decompression of video	H.264, on graphics cards that support Nvidia CUDA
Supported video resolutions	As supported by cameras, from CIF to megapixel
Other equipment	I/O IP equipment (dry contact sensors, relays), built-in pan/tilt/zoom devices (PTZ) in cameras
Support for embedded video analysis in cameras	Yes
Embedded video analysis	10 types of detections
Sound processing	3 audio analytic types
Core functions	<ul style="list-style-type: none"> • Automated IP device discovery • Pre-event video recording buffer • Simultaneous recording to archive and real-time surveillance • Synchronous playback of video footage recorded by several cameras • Playback with fast- or slow-motion in forward or reverse • Analysis of audio and video streams • Archive navigation through events recognized by video analytics or tagged by operators • Recording, alarm generation, management of relays and camera PTZ devices, notification by SMS, e-mail or through camera speaker output. These functions can be event-driven (response scenarios), and recording can be continuous or be initiated by an operator (alarm handling mode) • Multi-level User Rights • Support for widescreen displays and cameras, and touch screen displays
Features	<ul style="list-style-type: none"> • Able to handle multistreams from same camera for recording, display and backup • Capability to choose the write location and recording parameters for various cameras and for various events that initiate recording