



milestone

The Open Platform Company



XProtect™ Enterprise 7.0

Specification Sheet





Contents

Feature Overview	3
Integration Options	3
Key Features	3
Administration Features.....	3
Detailed Product Features	4
XProtect Enterprise Server Modules	4
XProtect Enterprise Client Modules.....	5
Minimum System Requirements	6
XProtect Enterprise Clients.....	6
XProtect Enterprise Servers.....	6
Miscellaneous	7
Supported Languages	7
Licensing Structure	7



Feature Overview

Key Features

- **Open Platform:**
Open API/SDK, supports seamless integration with third party applications.
- **Multi-server and multi-site video surveillance solution:**
Unlimited recording of video from IP cameras, IP video encoders and selected DVRs with analog cameras.
- **Optimized Recording Storage Management:**
Unique data storage and archiving solution that combines superior performance and scalability and cost efficient long-term video storage
- **Wide IP camera and device support:**
Supports connection of more than 839 IP cameras, IP video encoders and selected DVR models from over 79 different vendors through dedicated device integration
- **ONVIF™ and PSIA compliant:**
Supports ONVIF™ and PSIA compliant cameras and devices
- **Wide compression technology support:**
Supports the news compression methods; MPEG4 ASP, MxPEG and H.264, besides MJPEG and MPEG4
- **System configuration wizards:**
Guides the user through the process of adding cameras, configuring video and recording, adjustment of motion detection and user configuration
- **Sequence Explorer:**
Displaying sequences and time intervals in thumbnail pre-views, the Sequence Explorer gives unparalleled visual overview of recorded video combined with smooth navigation
- **Overlay buttons**
Intuitive control of cameras, camera-integrated devices and other integrated systems- directly from the camera view
- **Independent Playback**
Instant and independent playback function allows you to independently playback recorded video for one or more cameras, while in live viewing or playback mode
- **Built-in Video Motion Detection:**
Independent of camera model and supporting up to 64 cameras simultaneously per server
- **Multiple language support:**
Let operators use the system in their native language with support for 20 different languages
- **Multi-channel, two-way audio:**
Communicate with people at gates/entrances or broadcast messages to many people at once with multi-channel, two-way audio
- **Fast evidence export:**
Quickly deliver authentic evidence to public authorities by exporting video to various formats, including video from multiple cameras with viewer, logs, and user notes included

Administration Features

- **Single Management Application:** A new Management Application provides a consolidated single point management access to XProtect Enterprise Recording Servers.
- **System configuration wizards:** Guides the user through the process of adding cameras, configuring video and recording, adjustment of motion detection and user configuration.
- **Automated device discovery:** Enables fast discovery of camera devices using methods such as Universal Plug And Play, Broadcast and IP Range scanning.
- **Smart bulk configuration option:** Change settings across multiple devices simultaneously and in a very few clicks.
- **Adaptable application behavior:** Guides novice users, while expert users can optimize the application for efficient use.
- **Export/import of system and user configuration data:** System backup for reliable system operation and fast system recovery. System cloning for efficient rollout of multiple systems with the same, or similar, configuration.
- **Import of off-line configuration data:** Enabling off-line editing of configuration data, including camera and device definitions.
- **Automatic system restore points:** A 'Restore Point' is created each time a configuration change is confirmed. Enables easy rollback to previously defined system configuration points and enables cancelation of undesired configuration changes and restoration of earlier valid configurations.

Integration Options

- XProtect's Open Software Development Kit (SDK) makes it possible to video enable your business processes, through seamless integration of third party applications, such as video analytics, access systems, etc.
- Compatible with XProtect Transact that integrates video surveillance with ATM or POS cash register systems for managing loss prevention and fraud.
- Compatible with XProtect Central for alarm overviews and operational status in larger video surveillance installations.
- Integrate with access control systems, alarms, gates, building management systems, etc. using hardware I/O, internal events and TCP/IP events
- Create, import and use HTML pages for navigation between views or to trigger a Smart Wall preset
- Develop third party plug-ins for the Smart Client to expand with new functionality



Detailed Product Features

XProtect Enterprise Server Modules

Recording Server

- Simultaneous digital multi-channel video and audio recording and live viewing (relaying).
- Two-way audio enables integrated control of microphones and speakers connected to IP devices.
- Bandwidth optimized multi-streaming by splitting a single camera video stream to differentiated streams for live view and recording, where each can be optimized independently with respect to frame rate and resolution.
- Connectivity to cameras, video encoders and selected DVRs supports MJPEG, MPEG4, MPEG4 ASP*, H.264* and MxPEG.
- Auto-detect camera models during setup.
- Flexible multi-site, multi-server license structure charged per camera.
- Unlimited number of installed cameras; simultaneous recording and live view of up to 64 cameras per server.
- Recording technology: secure high speed database holding JPEG images or MPEG4 and MxPEG streams including audio.
- Recording speed: 30+ frames per second per camera, limited only by hardware.
- Recording quality depends entirely on camera and video encoder capabilities: no software limitation.
- Start cameras on live view requests from clients.
- Unlimited recording capacity with multiple archives possible per day.
- Hourly to daily database archiving with optional automatic move to network drive saves storage capacity on the local server – with images still available transparently for playback
- Built-in, real-time, camera independent motion detection (VMD); fully adjustable sensitivity, zone exclusions, recording activation with frame rate speed up, and alert activation through email or SMS.
- Start recording on event.
- Client initiated start of recording based on pre-defined recording time and access privileges.
- Pan Tilt Zoom (PTZ) preset positions, up to 50 per camera.
- Absolute* and relative PTZ positioning.
- PTZ go-to preset position on events.
- Combine PTZ patrolling and go-to positions on events.
- Set multiple patrolling schedules per camera per day: i.e. different for day/night/weekend.
- PTZ scanning on supported devices: viewing or recording while moving slowly between PTZ positions.
- VMD-sensitive PTZ patrolling among selected presets allows sending of Wipe and Wash commands to supported PTZ models.
- On pre-defined events Matrix remote commands are automatically sent to display live video remotely on computers running the Matrix Monitor or the Smart Client with Matrix Plug-in.
- Flexible notification (sound, e-mail and SMS) and camera patrolling scheduling, triggered by time or event.

Recording Server Manager

- Local console management of the Recording Server accessible from the notification area.
- Start and stop Recording Server service.
- Access to Recording Server configuration settings.
- Access to Recording Server help system.
- View system status and log information.

Image Server

- Remote access for Smart and Remote Clients.
- Built-in web server for download and launch of clients and plug-ins.
- Set up one Master and multiple Slave Servers.
- Authenticate access based on Microsoft Active Directory user account, or XProtect user name and password.
- Authorize access privileges per Microsoft Active Directory user account/group, XProtect user profile or grant full access.
- User profiles control access to: Live view, PTZ, PTZ presets, Output control, Events, Listen to microphone, Talk to speaker, Manual recording; Playback, AVI export, JPG export, DB export, Sequences, Smart Search and audio. As well as Set up views, Edit private views and Edit shared public views.
- Audit logs of exported evidence by user and file.
- Audit logs of client user activity by time, locations and cameras.

Recording Viewer

- Playback recorded video and audio locally on the Recording Server.
- View up to 16 cameras time-synched during playback.
- Scrollable activity timeline with magnifying feature.
- Instant search on recordings based on date/time and activity/alarm (Video Motion Detection).
- 'Smart Search' for highlighted image zones and objects.
- Evidence can be generated as a printed report, a JPEG image, an AVI film or in the native database format.
- Export audio recordings in WAV or AVI format.
- Export video digitally zoomed to view area of interest only and to minimize export footprint size.
- Export 'Evidence CD' containing native database and Recording Viewer for instant, easy viewing by authorities.
- Encryption & password protection option for exported recordings and files.
- Ability to add comments to exported evidence, also encrypted.
- Option to send email.
- De-interlacing of video from analog cameras.
- IPIX technology for PTZ in 360° recorded images.

PDA Server

- Remote access for PDA Client.
- Handle login and session requests between PDA clients and Image Server.
- Resize video surveillance images to fit the screen layout of PDA Client.



XProtect Enterprise Client Modules

Smart Client

- Smart Client includes all the features of XProtect Remote Client plus more:
- Installed per default on Recording Server for local viewing and playback of video and audio.
- Start recording on cameras for a pre-defined time (default 5 minutes). Subject to privileges set by administrator.
- Independent Playback capability allows for instant playback of recorded video for one or more cameras, while in live and playback mode
- Live view digital zoom allows zoomed-out recordings while the operator digitally can zoom in to see details.
- 'Update On Motion Only' optimizes CPU usage by letting motion detection control whether the image should be decoded and displayed or not. The visual effect is a still image in the view until motion is detected.
- Shared and private camera views offer 1x1 up to 10x10 layouts in addition to asymmetric views.
- Views optimized for both 4:3 and 16:9 screen ratios.
- Multiple computer monitor support with a main window and any number of either windowed or full screen views.
- Hotspot function for working in details with a camera selected from a view containing multiple cameras.
- Carousel function allows a specified view to rotate between pre-defined cameras with individual timing and order with multiple appearances. Carousel function can be controlled allowing the operator to pause carousel function and to switch to previous or next camera.
- Overlay buttons provides intuitive control of cameras, camera-integrated devices and other integrated systems- directly from the camera view
- Matrix function to view live video from multiple cameras through the Image Server in any view layout with customizable rotation path, remotely controlled by Smart Clients or Recording Servers sending Matrix remote commands
- Send Matrix remote commands to display live video remotely on computers running the Matrix Monitor or the Smart Client with Matrix Plug-in.
- Cameras' built-in audio sources available in live and in playback.
- Separate pop-up window displaying sequences and time intervals in thumbnail pre-views, the Sequence Explorer gives unparalleled visual overview of recorded video combined with smooth navigation
- Presents recorded sequences for individual cameras, or all cameras in a view
- Seamlessly available in both Live and Playback modes
- Smooth navigation with sliding preview and "drag-and-throw" function for video thumbnails
- Instant playback of video sequences
- Application Options allows users to adapt the layout and personalize the application to their particular preferences

Remote Client

- View live video or playback recordings for 1-16 cameras simultaneously; from the same or different servers.
- Advanced video navigation including fast/slow playback, jump to date/time, single step and video motion search.
- Individual views can be user-defined in various layouts: view or playback camera images from multiple servers simultaneously in the same view.
- Shared views can be managed centrally via the server with admin/user rights and user groups.
- Import static or active HTML maps for fast navigation to cameras and good premise overviews.
- Control output port relay operation, for example control of gates.
- Quick overview of sequences with detected motion and preview window.
- Quick overview of events/alerts.
- Control PTZ cameras remotely, also using preset positions.
- Remote PTZ Point-and-Click control.
- Remote PTZ zoom to a marked rectangle.
- Take manual control over a PTZ camera that runs a patrolling scheme; after a timeout with no activity the camera reverts to its scheduled patrolling.
- IPIX 1x2 or 2x2 'Quad View' for viewing all 360° at once.
- Optional video compression in streaming from server to client gives better use of bandwidth.
- Create AVI files or save JPEG images.
- Print incident reports with free-text user comments.
- System logon using XProtect user name and password.
- System logon using Microsoft Active Directory user accounts.

PDA Client

- View live or playback video from a single server or from multiple servers in half-screen or full-screen formats.
- In live view you can control Pan/Tilt/Zoom cameras manually or use preset positions, and control the cameras' output relays to trigger external actions like opening doors or gates, turning on lights, etc.
- To find recordings, you can jump to specific time/date or to next detected motion, or use motion detection sequence overviews.
- When viewing recordings, you can playback at variable speed or single step image by image.
- The PDA client connects to the XProtect Enterprise server using any IP connection; typically wireless LAN, GPRS, etc.
- Video compression from the server to PDA optimizes bandwidth usage.
- System logon using XProtect user name and password.

Matrix Monitor

- Virtual Matrix showing live video directly from up to 4 cameras at a time triggered remotely by Matrix remote commands.
- Camera view shifts by FIFO (first-in-first-out)
- Multiple events can control a single Matrix monitor and single events can control multiple monitors.



Minimum System Requirements

XProtect Enterprise Servers

XProtect Enterprise Recording Server 7.0

- **HW Platform:**
Minimum 2.4 GHz CPU and 1 GB RAM (2.4 GHz dual core processor and 2 GB RAM or more recommended). Minimum 1 GB disk space available, excluding space needed for recordings.
- **OS:**
Microsoft® Windows® XP Professional (32 bit or 64 bit*), Windows Server 2003 (32 bit or 64 bit*), Windows Server 2008 R1/R2 (32 bit or 64 bit*), Windows Vista™ Business (32 bit or 64 bit*), Windows Vista Enterprise (32 bit or 64 bit*), Windows Vista Ultimate (32 bit or 64 bit*), Windows 7 Professional (32 bit or 64 bit*), Windows 7 Enterprise (32 bit or 64 bit*) and Windows 7 Ultimate (32 bit or 64 bit*).
- **Software:**
Microsoft .NET 3.5 Framework SP1, or newer.
DirectX 9.0 or newer required to run Playback Viewer application.

XProtect Enterprise PDA Server 1.0

- **HW Platform:**
Minimum 2.4 GHz CPU and 1 GB RAM (2.4 GHz dual core processor and 2 GB RAM or more recommended). Minimum 1 GB disk space available.
- **OS:**
Microsoft Windows XP Professional (32 bit or 64 bit*), Windows Server 2003 (32 bit or 64 bit*).
- **Software:**
Microsoft .NET 2.0 (not compatible with newer versions).
Internet Information Server (IIS) 5.1.

XProtect Enterprise Clients

XProtect Smart Client 5.0

- **HW Platform:**
Minimum 2.4 GHz CPU, 1 GB RAM (more powerful CPU and higher RAM recommended for Smart Clients running high number of cameras and multiple views and displays).
- **Graphics Card:**
AGP or PCI-Express, minimum 1024 x 768 (1280 x 1024 recommended), 16 bit colors.
- **OS:**
Microsoft Windows XP Professional (32 bit or 64 bit*), Windows Server 2003 (32 bit or 64 bit*), Windows Server 2008 R1/R2 (32 bit or 64 bit*), Windows Vista Business (32 bit or 64 bit*), Windows Vista Enterprise (32 bit or 64 bit*), Windows Vista Ultimate (32 bit or 64 bit*), Windows 7 Professional (32 bit or 64 bit*), Windows 7 Enterprise (32 bit or 64 bit*) and Windows 7 Ultimate (32 bit or 64 bit*).
- **Software:**
DirectX 9.0 or newer required to run Playback Viewer application.
Microsoft .NET 3.5 Framework SP1, or newer.

XProtect Remote Client 3.6

- **HW Platform:**
Minimum 2.4 GHz CPU, RAM 1 GB (2 GB or higher recommended on Microsoft Windows Vista).
- **OS:**
Microsoft Windows XP Professional (32 bit or 64 bit*), Windows Server 2003 (32 bit or 64 bit*), Windows Server 2008 R1/R2 (32 bit or 64 bit*), Windows Vista Business (32 bit or 64 bit*), Windows Vista Enterprise (32 bit or 64 bit*) and Windows Vista Ultimate (32 bit or 64 bit*), Windows 7 Professional (32 bit or 64 bit*), Windows 7 Enterprise (32 bit or 64 bit*) and Windows 7 Ultimate (32 bit or 64 bit*).
- **Software:**
DirectX 9.0 or newer required to run Playback Viewer application
Microsoft Internet Explorer 6.0, or newer, 32 bit version required

XProtect PDA Client 1.0

- **HW Platform:**
Intel StrongARM® or 100% compatible.
Minimum 32 Mbyte RAM.
- **OS:**
Microsoft Windows Pocket PC 2003/2003 SE/Mobile 5.0.
- **Network:**
Ethernet (256 Kbit or higher recommended).

XProtect Matrix Client 2.3

- **HW Platform:**
Minimum 2.4 GHz CPU, RAM 1 GB (2 GB or higher recommended on Microsoft Windows Vista).
- **OS:**
Microsoft Windows XP Professional (32 bit or 64 bit*), Windows Server 2003 (32 bit or 64 bit*), Windows Server 2008 (32 bit or 64 bit*), Windows Vista Business (32 bit or 64 bit*), Windows Vista Enterprise (32 bit or 64 bit*) and Windows Vista Ultimate (32 bit or 64 bit*).
- **Software:**
DirectX 9.0 or newer required to run Playback Viewer application

*) Running as a 32 bit service/application



Miscellaneous

Supported Languages

Enterprise Management Application 7.0

- English, German, French, Spanish, Italian, Danish, and Japanese

XProtect Smart Client 5.0

- English, Arabic, Simplified Chinese, Traditional Chinese, Czech, German, Danish, Spanish, French, Hungarian, Italian, Japanese, Korean, Dutch, Polish, Russian, Swedish, Turkish, Slovak, and Finnish

XProtect Remote Client 3.6

- English, German, French, Spanish, Simplified Chinese, Japanese, Italian, Danish, and Swedish

PDA Client 1.0

- English and Simplified Chinese.

Matrix Monitor 2.3:

- English.

Licensing Structure

Base Server License

- An XProtect Enterprise Base Server license is mandatory for installing the product
- The Base Server license contains:
 - Unlimited numbers of Recording Server licenses
 - Unlimited numbers of Smart Clients, Remote Clients, PDA Clients and Matrix Monitor licenses

Camera License

- To connect to a camera, a Device License per camera channel is required
- In total, for all copies of the product installed under a given Base Server license, the product may only be used with as many cameras as you have purchased camera licenses for
- Video encoders and DVRs with multiple analog cameras require a license per channel to operate
- Camera Licenses can be purchased in any numbers. To extend the installation with additional Camera Licenses, the Base Server License number (SLC) is required when ordering.

Client License:

- All client modules are not licensed and can be installed and used on any number of computers.