



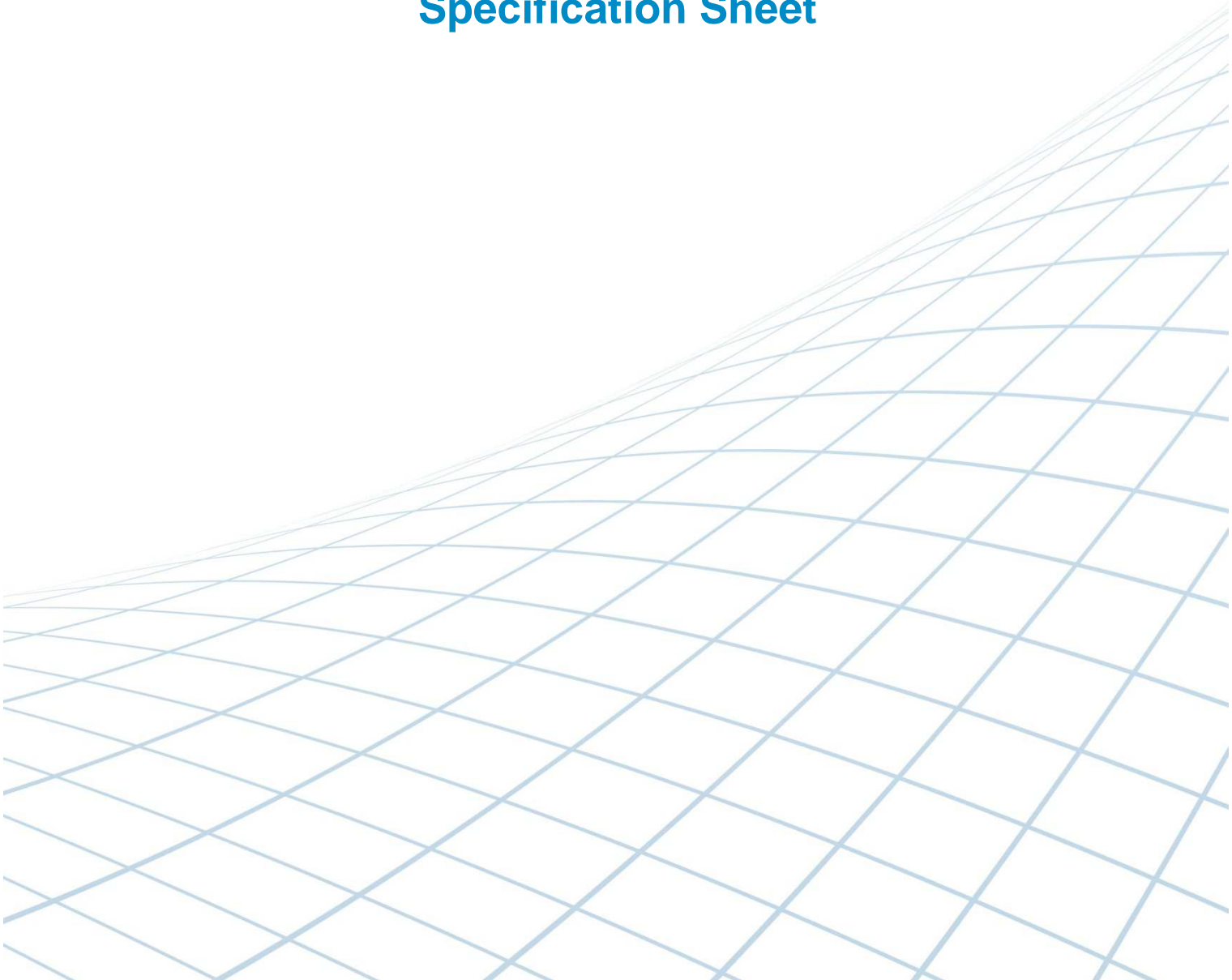
milestone

The Open Platform Company



XProtect[®] Enterprise 8

Specification Sheet





Contents

Feature Overview	3
XProtect Enterprise Server Modules	3
XProtect Enterprise Client Modules	3
Detailed Product Features	4
XProtect Enterprise Server modules	4
XProtect Enterprise Server 8.0a	4
XProtect Enterprise Client Modules	5
XProtect Smart Client	5
XProtect Smart Client - Player	5
XProtect Remote Client	6
Integration Options	6
System Requirements.....	7
XProtect Enterprise Server modules	7
XProtect Enterprise Server 8.0a	7
XProtect Enterprise Clients.....	7
XProtect Smart Client 6.0a and XProtect Smart Client – Player	7
XProtect Remote Client 3.6	7
Miscellaneous	7
Supported languages.....	8
XProtect Enterprise Server 8.0a	8
XProtect Smart Client 6.0a and XProtect Smart Client – Player	8
Licensing Structure	8
Base Server License	8
Camera License.....	8
Client License	8



Feature Overview

XProtect Enterprise Server Modules

- **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
- **Wide IP camera and device support:**
Supports more than 1,000 IP cameras, encoders and digital video recorders (DVRs) from almost 100 different manufacturers
- **ONVIF™ and PSIA compliant:**
Supports ONVIF™ and PSIA compliant cameras and devices
- **Optimized Recording Storage Management:**
Unique data storage and archiving solution that combines superior performance and scalability and cost efficient long-term video storage
- **Wide compression technology support:**
Supports the new compression methods; MPEG4 ASP, MxPEG and H.264, besides MJPEG and MPEG4
- **Dual streaming:**
Hardware use is optimized with two independent, configurable video streams, one for live viewing, and one for recording. No client side configuration needed
- **System configuration wizards:**
Guides the user through the process of adding cameras, configuring video and recording, adjustment of motion detection and user configuration
- **Built-in Video Motion Detection:**
Independent of camera model and supporting up to 64 cameras simultaneously per server
- **Automatic license activation:**
Automatic online activation or offline activation. 30-day camera license grace period. No needs to keep track of license keys, system gather and handle all information automatically
- **Privacy masking:**
The privacy masking capability enables administrators to define privacy masks for individual cameras to hide areas in the camera view that must not be visible or recorded in order to comply with local legislation.
- **Easier installation:**
Quickly start the installation with a few mouse clicks – all languages and applications in one installer (Management application supports 11 languages)

XProtect Enterprise Client Modules

- **Map:**
Interactive, multi-layered maps provide the operator with a comprehensive overview of cameras, devices and layouts of an entire surveillance installation
- **Alarm Manager:**
Alarms are consolidated from all security devices and systems into the Alarm Manager for immediate visual verification of alarms
- **Camera Navigator:**
The Camera Navigator provides more consistent and comprehensive visual verification, ensuring easier object tracking in geographically complex security locations.
- **360° Panomorph lens technology:**
Removes blind spots, track, detect and analyze the entire area in live or playback mode– only one camera license required for the 360° Panomorph lens
- **Overlay buttons:**
Intuitive control of cameras, camera-integrated devices and other integrated systems- directly from the camera view
- **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
- **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
- **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
- **Smart Search**
Quickly gather and refine evidence by searching for changes or objects in the video.
- **Fast evidence export:**
Seamlessly export video in various formats, including video from multiple cameras with viewer, logs and user notes included.
- **Multiple language support:**
Supports 26 languages



Detailed Product Features

XProtect Enterprise Server modules

XProtect Enterprise Server 8

Management Application

- Single Management Application provides a consolidated single point 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 allows changes to the 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 allows 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 enables off-line editing of configuration data, including camera and device definitions.
- Automatic system restore points are 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.

Recording Server

- 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 quality depends entirely on camera and video encoder capabilities: no software limitation (30+ frames per second per camera).
- Dual streams from cameras can be individually optimized on compression, resolution and frame rate, meeting recording and live monitoring requirements.
- 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.
- Simultaneous digital multi-channel video and audio recording and live viewing (relaying).
- Connectivity to cameras, video encoders and selected DVRs supports MJPEG, MPEG4, MPEG4 ASP*, H.264* and MxPEG.

- Recording technology: secure high speed database holding JPEG images or MPEG4 and MxPEG streams including audio.
- 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
- Start recording on event.
- 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.
- Audit logs of exported evidence by user and file.
- Audit logs of client user activity by time, locations and cameras.
- Local console management of the Recording Server accessible from the notification area.
 - Start and stop Recording Server service.
 - Access to Recording Server configuration settings.
 - Accesses to Recording Server help system.
 - View system status and log information.
 - Built-in web server for download and launch of clients and plug-ins.
- Remote access for Smart and Remote Clients.
- 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.
- Client initiated start of recording based on pre-defined recording time or manual stop, and access privileges.
- Start cameras on live view requests from clients.
- 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.
- Two-way audio enables integrated control of microphones and speakers connected to IP devices.
- On pre-defined events Matrix remote commands are automatically sent to display live video remotely on computers running the Smart Client with Matrix Plug-in.
- Flexible notification (sound, e-mail and SMS) and camera patrolling scheduling, triggered by time or event.
- 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



XProtect Enterprise Client Modules

XProtect Smart Client

- Smart Client includes all the features of XProtect Smart Client – Player and 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.
- Support for native 64-bit operating systems
- 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 the 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 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
- IPIX technology for PTZ in 360° recorded images.
- 360° ImmerVision Enables[®] Panomorph lens technology
- Camera Navigator allows easy tracking of objects.
- MIP SDK 2.0 plug-in support
- Smart Client – Player replaces the former viewer application. Gives the same look and feel between Smart Client and Viewer. The new "project" concept offers efficient handling of multiple exports

XProtect Smart Client - Player

- Playback of recorded or achieved video and audio evidence.
- Same user-friendly interface and most functions as the XProtect Smart Client
- Instant one-click playback for easy viewing of exported video evidence
- Advanced second-level investigation tools make it easy to refine exported video and re-export the most essential evidence
- The project tool allows users to merge video exports or archives from two different locations or XProtect systems together into one new export
- View up to 100 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.
- Re-export evidence containing native database and the XProtect Smart Client - Player for instant, easy viewing by authorities.
- Encryption & password protection option for exported recordings and files.
- Ability to add comments to exported evidence, also encrypted.
- De-interlacing of video from analog cameras.
- IPIX technology for PTZ in 360° recorded images.
- 360° ImmerVision Enables[®] Panomorph lens technology.



XProtect 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

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 directly links video with transaction data from POS or ATMs. Transactions and corresponding video can be monitored live or viewed later to identify shrinkage, fraud or simply validate a transaction.
- Compatible with XProtect Central enabling alarm central organizations and system integrators to manage and monitor alarms from a set of independent Milestone installations. XProtect Central provides continuous monitoring of alarm status from XProtect servers, video surveillance cameras and external devices.
- Integrate with access control systems, alarms, gates, building management systems, etc. using hardware I/O, internal events and TCP/IP events



System Requirements

XProtect Enterprise Server modules

XProtect Enterprise Server 8.0a

- **HW Platform:**
CPU: Intel® Pentium® 4, 2.4 GHz or higher (Core™ 2 recommended).
RAM: Minimum 2 GB (4 GB or more recommended).
Minimum 10 GB free hard disk space available, excluding space needed for recordings.
Ethernet: 1 *Gigabit* recommended
HDD: E-IDE, PATA, SATA, SCSI, SAS (7200 RPM or faster).
Onboard GFX, AGP or PCI-Express, minimum 1024 x 768, 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:**
Microsoft .NET 4.0 Framework.
DirectX 9.0 or newer.
Windows Help (WinHlp32.exe)

All are downloadable from
<http://www.microsoft.com/downloads>

XProtect Enterprise Clients

XProtect Smart Client 6.0a and XProtect Smart Client – Player

- **HW Platform:**
CPU: Intel Core2™ Duo, minimum 2.4 GHz or higher (more powerful CPU recommended for Smart Clients running high number of cameras and multiple views and displays).
RAM: Minimum 2 GB (higher RAM recommended for Smart Clients running high number of cameras and multiple views and displays).
NETWORK: Ethernet (100 Mbit or higher recommended).
HDD: Minimum 1 GB free.
Graphics Adapter: 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:**
Microsoft .NET 4.0 Framework
DirectX 9.0.

XProtect Remote Client 3.6

- **HW Platform:**
Minimum 2.4 GHz CPU, RAM 2 GB (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

*) Running as a 32 bit service/application



Miscellaneous

Supported languages

XProtect Enterprise Server 8.0a

- English, Portuguese (Brazil), Simplified Chinese, Traditional Chinese, Danish, French, German, Italian, Japanese, Russian and Spanish.
- Administrator's Getting Start Guide is in English, Portuguese (Brazil), Simplified Chinese, Traditional Chinese, Danish, French, German, Italian, Japanese, Russian and Spanish.
- The XProtect Enterprise help system is available in English, French, Portuguese (Brazil) and Simplified Chinese.

XProtect Smart Client 6.0a and XProtect Smart Client – Player

- English, Arabic, Bulgarian, Portuguese (Brazil), Simplified Chinese, Traditional Chinese, Czech, Danish, Dutch, Finnish, French, German, Hebrew, Hindi, Hungarian, Italian, Japanese, Korean, Norwegian, Polish, Russian, Swedish, Slovak, Spanish, Thai and Turkish.
- The XProtect Smart Client Help System and User's Manual are in all languages except Bulgarian, Finish, Hebrew, Hindi, Hungarian, Slovak and Thai.

Licensing Structure

Base Server License

- A XProtect Enterprise Base Server license is mandatory for installing the product. The product may be installed on an unlimited number of computers designated as Master Servers per Software License Code. The product may be installed on an unlimited number of Slave Server computers per designated Master Server using the same Software License Code.
- The Base Server license contains the XProtect Enterprise Server modules, and PDA Server, plus the client modules XProtect Smart Client, XProtect Smart Client – Player, XProtect Remote Client and XProtect PDA Client.

Camera License

- To connect to a camera, a license per camera channel is required. In total, for all copies of the product installed under this license, the product may only be used with as many cameras as you have purchased camera licenses for.
- Video encoders and DVRs connected to multiple analog cameras require a camera 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

- The XProtect Enterprise Client Modules: XProtect Smart Client, XProtect Smart Client – Player, XProtect Remote Client and XProtect PDA Client are not licensed and can be installed and used on any number of computers.