



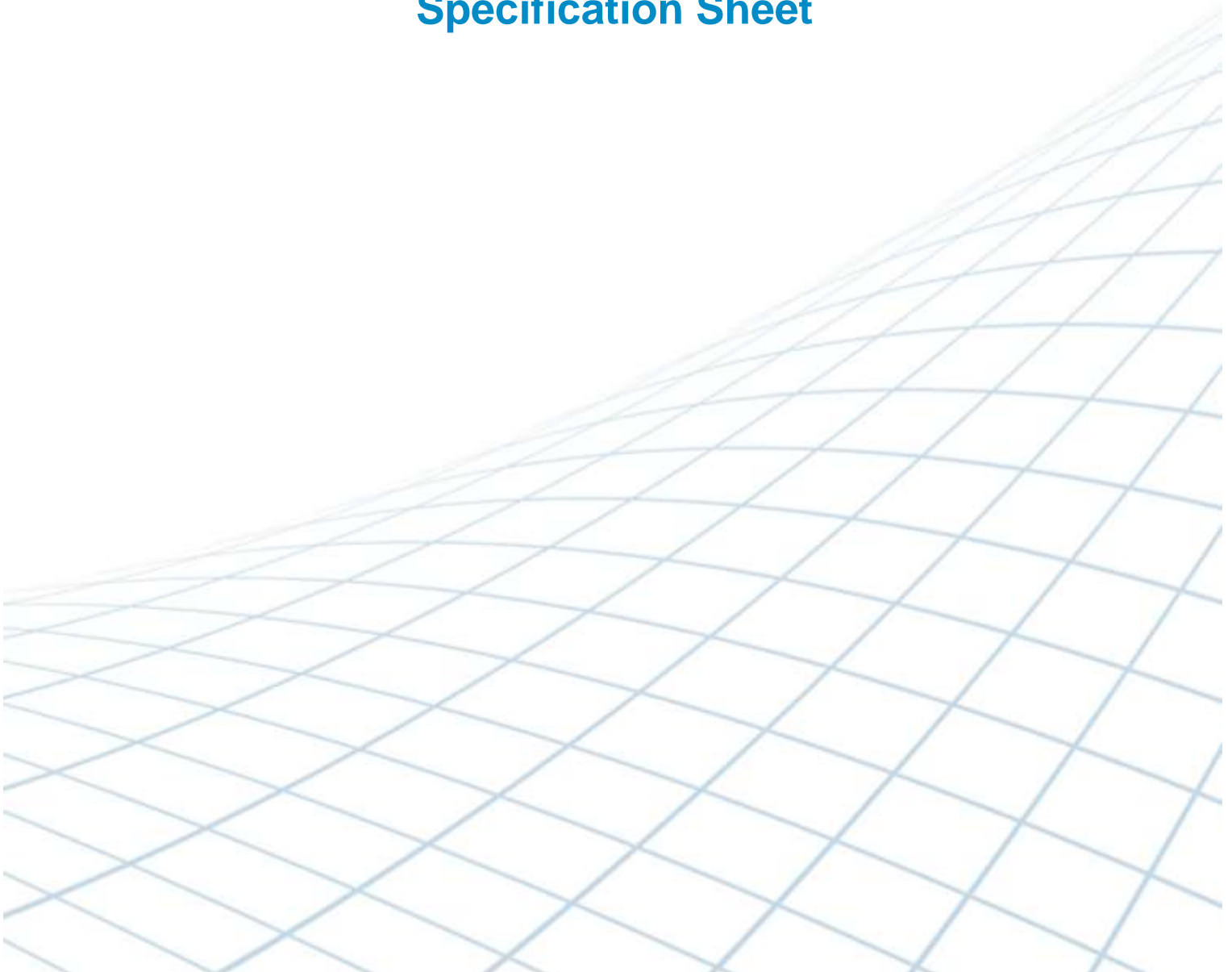
milestone

The Open Platform Company



Milestone Husky™ M50

Specification Sheet





Contents

| | |
|--|----------|
| Feature Overview | 3 |
| Milestone Husky M50 server modules | 3 |
| Milestone Husky M50 client modules | 3 |
| Detailed Product Features | 4 |
| Milestone Husky M50 server modules | 4 |
| Milestone Husky M50 client modules | 6 |
| XProtect Smart Client | 6 |
| XProtect Smart Client - Player | 6 |
| XProtect Web Client | 7 |
| Milestone Mobile | 7 |
| Integration options | 8 |
| System Requirements | 9 |
| Milestone Husky M50 clients | 9 |
| XProtect Smart Client 2013 R2 and XProtect Smart Client – Player | 9 |
| XProtect Web Client 2013 R2 | 9 |
| Milestone Mobile 2013 R2 | 9 |
| Supported languages | 10 |
| Milestone Husky M50 Management Application | 10 |
| XProtect Smart Client 2013 R2 and XProtect Smart Client – Player | 10 |
| XProtect Web Client and Milestone Mobile | 10 |



Feature Overview

Milestone Husky M50 server modules

- **Ready-to-use:**
Ready-to-use XProtect video management software (VMS) pre-installed
 - **Open platform:**
Open application programming interface (API)/software development kit (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 digital video recorders (DVRs) with analog cameras
 - **Wide IP camera and device support:**
Supports more than 2,400 IP cameras, encoders and DVRs from 120 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 with cost-efficient, long-term video storage
 - **Wide compression technology support:**
Supports a variety of compression methods: MJPEG, H.263, MPEG-4 Pt. 2 Simple Profile and Advanced Simple Profile, H.264/MPEG-4 AVC, and MxPEG
 - **Dual streaming:**
Hardware use is optimized with two independent, configurable video streams, one for live viewing and one for recording. No client configuration required
 - **System configuration wizards:**
Guides the user through the process of adding cameras, configuring video and recording, adjusting motion detection and configuring users
 - **Built-in video motion detection:**
Independent of camera model and supporting up to 80 cameras simultaneously per server
 - **Automatic license activation:**
Automatic online or offline activation with a 30-day camera license grace period
 - **Privacy masking:**
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
- Support for Milestone Customer Dashboard**
Resellers can obtain a real-time overview of the system health of their customers' installations, while the included 3-year Software Upgrade Plan (SUP) is valid. This enables them to proactively solve technical incidents in the system before it becomes a problem for the customer.

Milestone Husky M50 client modules

- **Power of choice:**
Use any combination of the three available clients, XProtect® Smart Client, XProtect® Web Client and Milestone Mobile
- **View live video:**
Use any client for constant live monitoring
- **View recorded video:**
Use any client to view incidents which occurred in the past
- **Situational awareness:**
With support for Maps and Alarms, XProtect Smart Client offers real-time situational awareness
- **Common design:**
The three XProtect clients share a common design and basic functionalities, such as camera views, enabling a seamless switch between interfaces
- **PTZ Control:**
Pan-tilt-zoom (PTZ) cameras can be controlled and suspicious activity can be investigated
- **Share or export recordings:**
Export video in native database format and share with external viewers using the XProtect Smart Client Player. Moreover, instantly share exports between Milestone Mobile and XProtect Web Client using a server side export to avoid moving large files through remote connections
- **Output control and event triggering:**
Use any of the clients to activate system events or trigger outputs on the connected devices
- **Available in 26 languages**
Use any of the clients in your preferred language from the list of the 26 languages supported



Detailed Product Features

Milestone Husky M50 server modules

Management Application

- A single Management Application provides a consolidated point of access to your Milestone Husky M50
- System configuration wizards guide the user through the process of adding cameras, configuring video and recording, adjusting motion detection and configuring multiple users
- The device scanning enables fast discovery of camera devices using methods such as Universal Plug and Play, broadcast and IP range scanning
- Smart bulk configuration option allows simultaneous changes to the settings across multiple devices in few clicks
- The adaptable application behavior guides novice users, while expert users can optimize the application for more advanced use
- The export and import of system and user configuration data enables a reliable system operation and fast system recovery
- System cloning enables the efficient cloning of multiple systems with the same or similar configuration
- Import of configuration data enables offline editing of configuration data, including camera and device definitions
- Each time a configuration change is confirmed, automatic system restore points are created enabling an easy rollback to previously defined system configuration points. This also enables the cancellation of undesired configuration changes and restoration of earlier valid configurations
- Automatic configuration wizard helps users to configure the system when the Management Application starts for the first time

Recording Server

- Native 64-bit recording server provides the optimal utilization of available hardware resources
- Up to 80 installed cameras per server with simultaneous recording and live view
- Cameras supporting SSDP, mDNS or ONVIF Discovery are automatically discovered and installed in the default XProtect Smart Client view
- The Milestone Customer Dashboard allows resellers to take immediate action and fix any problems on a customer's installation including a broken camera or hard disk failure
- Dual streams from cameras can be optimized individually on compression, resolution and frame rate, meeting recording and live monitoring requirements
- Bandwidth is optimized with multi-streaming by splitting a single camera video stream to different streams for live view and recording, therefore they

can each 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, H.263, MPEG-4 Pt. 2 Simple Profile and Advanced Simple Profile, H.264/MPEG-4 AVC, and MxPEG
- Recording technology: secure high-speed database holding JPEG images or MPEG4 and MxPEG streams including audio
- Multiple archives with unlimited recording capacity per day
- Hourly to daily database archiving with optional automatic transition to network drive saves storage capacity on the local server – while images are still available transparently for playback
- Start recording on event
- Authenticate access based on Microsoft Active Directory user account or XProtect username 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
 - Access 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 XProtect Smart Client and XProtect Web client
- 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, XProtect (database) export, sequences, Smart Search and audio, set up views, edit private views and edit shared public views
- Operator-initiated recording based on a predefined recording duration or manual stop and access privileges
- Start cameras on live view requests from clients
- Built-in camera independent motion detection; fully adjustable to sensitivity, zone exclusions and recording activation with frame rate speed up and alert activation through email or SMS
- Two-way audio enables an integrated control of microphones and speakers connected to IP devices
- On predefined events Matrix remote commands are automatically sent to display live video remotely on computers running XProtect Smart Client



- Flexible notification (sound, email and SMS) and camera patrolling scheduling, triggered by time or event
- Up to 50 PTZ preset positions 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, such as day, night and weekends
- PTZ scanning on supported devices: viewing or recording while moving slowly between PTZ positions
- Video motion-detection sensitive PTZ patrolling among selected presets allows sending of wipe and wash commands to supported PTZ models
- Copies an XProtect Smart Client – Player to all hard drives used for recording and archiving. A Smart Client Project file is also created (when the recording server is shut down), making it simple and easy to access video even if the hard drive is removed from the server



Milestone Husky M50 client modules

XProtect Smart Client

- Dedicated task-oriented tabs for the Sequence Explorer and Alarm Manager in addition to the traditional Live and Playback tabs
- Application theme support with choice of dark or light theme
- Installed per default on a Recording Server for local viewing and playback of video and audio
- Start recording on cameras with a predefined time for example, default five minutes. Subject to privileges set by administrator
- Support for native 64-bit operating systems
- Independent playback capability allows for instant play back of recorded video for one or more cameras, while in live and playback mode
- Interactive, multi-layered maps provide the operator with a comprehensive overview of cameras, devices and layouts of an entire surveillance installation
- Seamlessly export video in various formats including video from multiple cameras, with evidence viewer, data logs and user notes included
- When exporting video in AVI or MKV format, the export can be played back in a standard player application. When exporting in MKV format the video is exported in the same format as originally recorded (similar to creating database export), as long as privacy masking is not enabled and video is recorded in H.264, JPEG or MPEG-4, except for MPEG-4 short header mode
- Quickly gather and refine evidence using Smart Search to locate changes or objects in the video
- With multi-channel, two-way audio, it is easy to communicate with people at gates/entrances or broadcast messages to many people at once
- Live view digital zoom allows zoomed-out recordings while the operator can digitally zoom in to see details
- "Update on Motion Only" optimizes CPU use by allowing motion detection to control whether or not the image should be decoded and displayed. 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 detail with a camera selected from a view containing multiple cameras
- Carousel function allows a specified view to rotate between predefined 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 provide 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 XProtect Smart Clients or Recording Servers sending Matrix remote commands
- Send Matrix remote commands to display live video remotely on computers running XProtect Smart Client
- Cameras' built-in audio sources available in live and in playback
- Separate pop-up window displaying sequences and time intervals in thumbnail previews, the Sequence Explorer gives a visual overview of recorded video combined with smooth navigation
 - Presents recorded sequences for individual cameras, or all cameras in a view
 - 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 allow users to adapt the layout and personalize the application to their particular preferences
- Create, edit or delete PTZ presets (not possible for PTZ type 2, where PTZ presets are stored in the camera device, but can't be modified from the XProtect software)
- Control PTZ cameras by using;
 - PTZ preset positions
 - PTZ point-and-click control
 - Overlay buttons
 - PTZ zoom to a defined rectangle
 - Video overlaid PTZ control
 - Virtual joystick function
 - Joystick
- 360° ImmerVision Enables[®] panomorph lens technology removes blind spots and allows operators to track, detect and analyze the entire area in live or playback mode. Only one camera license required for the 360° panomorph lens
- Camera Navigator allows the easy tracking of objects
- Milestone Integration Platform Software Development Kit (MIP SDK) 4.5 plug-in support
- XProtect Smart Client – Player replaces the former viewer application and offers efficient handling of multiple exports

XProtect Smart Client - Player

- Playback recorded or received video and audio evidence
- Offers a simplified and even more user-friendly interface compared to the XProtect Smart Client, including the capability to switch back to the full XProtect Smart Client interface, with almost the same 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 time-synched cameras during playback
- Scrollable activity timeline with a magnifying feature
- Instant search on recordings based on date/time and activity/alarm
- Evidence can be generated as a printed report, a JPEG image, an AVI or MKV film or in XProtect format
- Export audio recordings in WAV or AVI format
- Audio in MKV export is PCM, therefore it is available in a decoded version of what was originally recorded
- Export video digitally zoomed to view area of interest only and to minimize export footprint size
- Re-export evidence in XProtect, AVI or MKV format with the XProtect Smart Client - Player for instant, easy viewing by authorities
- Encryption and password protection option for exported recordings and files
- Ability to add comments to exported evidence, also encrypted
- De-interlacing of video from analog cameras
- 360° ImmerVision Enables® panomorph lens technology
- Automatically copied to all hard drives used by the Recording Server to store recordings and archives

XProtect Web Client

- Access XProtect Smart Client views through a browser to avoid using any advanced features
- Shared views can be managed centrally via the server with administrator/user rights and user groups
- Playback video easily including fast/slow playback, single frame step and jump to date/time with frame preview while adjusting time
- Control PTZ cameras remotely using preset positions
- Dynamic bandwidth optimization when streaming from server to client giving a better use of bandwidth
- Create AVI files or save JPEG images
- Export on the server to avoid moving large video files back and forth. Users can download only the files they need or save them to download when a faster connection is available
- Trigger outputs and events with live view of related camera
- System login using XProtect user name and password
- System login using Microsoft Active Directory user
- Secure connection through HTTPS

- Milestone Mobile server 2.6a or newer must be installed and configured, possibly on another server

Milestone Mobile

- Add login credentials for multiple servers in the Milestone Mobile Client to easily switch between sites or different connection addresses
- Views are inherited from the connected XProtect VMS system. The client automatically obtains the user's private and shared views from the system to be used as camera lists in the Milestone Mobile client
- A view with all cameras is automatically generated, allowing the Milestone Mobile client to be used when no views are set up. It also provides a quick way of searching through cameras
- Cameras can be viewed in full screen to better view any details. It is also possible to search through cameras in a view while in full screen by swiping left or right
- Digital pinch to zoom enables users to zoom in on a part of the image for closer review and to conduct a detailed investigation of video when using megapixel or high-definition cameras
- Playback recordings from the database and select a specific time or recorded sequence to start playback, step through recordings and select a playback speed
- View recordings from the database while keeping an eye on what is currently happening. The client displays a live picture-in-picture frame of the same camera when in playback mode. The picture-in-picture can be moved by dragging and double-tapping will return to live view
- Control PTZ cameras manually or by selecting predefined presets for quick navigation
- Video Push allows users to use the camera in their mobile device as any other camera in the installation. It is very easy to use and requires no setup in the mobile device
- Trigger outputs and events: Administrators can use their mobile device to trigger outputs connected to the XProtect VMS or trigger user-defined events to have greater control on the go
- Connect securely to the Milestone Mobile server using HTTPS encryption
- Export on the server to avoid moving large video files back and forth. Download only the required files or save them to download later when a faster connection is available
- Milestone Mobile server 2.6a or newer must be installed and configured, possibly on another server



Integration options

- XProtect's open SDK enables video to be incorporated into a business process through the seamless integration of third-party applications, such as video analytics and access systems
- Compatible with XProtect® Retail, an add-on to perform advanced data analysis. Based on transaction data from point-of-sale (POS) or automated teller machines (ATMs), XProtect Retail links data with corresponding video from relevant cameras
- Compatible with XProtect® Transact which 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
- With Milestone Interconnect™ support of Milestone Husky M50, installations connected with XProtect® Corporate provides continuous monitoring of alarm status from XProtect servers, video surveillance cameras and external devices
- Compatible with XProtect Screen Recorder, an add-on function that enables XProtect VMS to inconspicuously capture screen recordings of any Microsoft Windows-based PC or POS terminal. Captured screen recordings are managed just like camera recordings and can be viewed in live and playback mode and exported for evidence
- Integrates with systems such as access control, alarms, gates and building management using hardware input/output (I/O), internal events and TCP/IP events



System Requirements

Milestone Husky M50 clients

XProtect Smart Client 2013 R2 and XProtect Smart Client – Player

- Hardware platform:
CPU: Intel Core2™ Duo, minimum 2.4 GHz or higher (more powerful CPU recommended for XProtect Smart Clients running a high number of cameras and multiple views and displays)
RAM: Minimum 2 GB (higher RAM recommended for XProtect 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
- Operating system:
Microsoft® Windows® 8 Enterprise (32 bit or 64 bit)
Microsoft Windows 8 Pro (32 bit or 64 bit)
Microsoft Windows 7 Ultimate (32 bit or 64 bit)
Microsoft Windows 7 Enterprise (32 bit or 64 bit)
Microsoft Windows 7 Professional (32 bit or 64 bit)
Microsoft Windows Server 2012 (64 bit): Standard and Datacenter.
Microsoft Windows Server 2008 R2 (64 bit): Standard, Web, High Performance Computing (HPC), Enterprise, and Datacenter.
Microsoft Windows Server 2008 (32 bit or 64 bit)
Microsoft Windows Server 2003 (32 bit or 64 bit)
Microsoft Windows Vista Ultimate (32 bit or 64 bit)
Microsoft Windows Vista Enterprise (32 bit or 64 bit)
Microsoft Windows Vista Business (32 bit or 64 bit)
Microsoft Windows XP® Professional (32 bit or 64 bit)
- Software:
Microsoft .NET 4.0 Framework
DirectX 9.0
Windows Help (WinHlp32.exe)

XProtect Web Client 2013 R2

- Hardware platform:
CPU: Intel Core2™ Duo, minimum 2.4 GHz or higher (more powerful CPU recommended for XProtect Web Clients running high number of cameras or multiple instances)
RAM: Minimum 2 GB (higher RAM recommended for XProtect Web Clients running a high number of cameras or multiple instances)
Network: Any connection to the XProtect Mobile server (10 Mbit or higher recommended)

Screen: WXGA or higher recommended (1280 x 720), 16-bit colors

HDD: Minimum 1 GB free on machine where the XProtect Mobile server is installed (needed for exports)

- Browsers:
Microsoft Internet Explorer® 9 or later
Safari® 5 or later
Google Chrome™ 16 or later
Mozilla® Firefox® 11 or later

Milestone Mobile 2013 R2

- Applications available for download in the App Store and Google Play
- Hardware platform:
Android 2.2 or higher
Or iOS 6.0 or higher

Android is a trademark of Google Inc.

App Store is a service mark of Apple Inc.

Apple is a trademark of Apple Inc., registered in the U.S. and other countries.

iOS is a trademark or registered trademark of Cisco in the U.S. and other countries and is used under license.



Supported languages

Milestone Husky M50 Management Application

- English, Simplified Chinese, Traditional Chinese, Danish, French, German, Italian, Japanese, Portuguese (Brazil), Russian and Spanish
- Administrator's Getting Start Guide is available in English, Simplified Chinese, Traditional Chinese, Danish, French, German, Italian, Japanese, Portuguese (Brazil), Russian and Spanish
- The Milestone Husky M50 help system is available in English, Simplified Chinese, French and Portuguese (Brazil)

XProtect Smart Client 2013 R2 and XProtect Smart Client – Player

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

XProtect Web Client and Milestone Mobile

- English, Arabic, Bulgarian, Simplified Chinese, Traditional Chinese, Czech, Danish, Dutch, Finnish, French, German, Hebrew, Hindi, Hungarian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese (Brazil), Russian, Slovak, Spanish, Swedish, Thai and Turkish