Specification Sheet

MOBOTIX HUB L5

+ Video Wall

MOBOTIX AG

Contents

Feature Overview

Key features

- **Limitless multi-server and multi-site solution:** MOBOTIX HUB L5 supports an unrestricted number of users, hardware devices, servers and sites. It allows the expansion of any installation as it is required
- **High performance recording server:** Building on a native 64-bit windows implementation and a highly-optimized database technology with RAM-based pre-buffering, the recording server supports minimum 3.1 Gbit/s recording rate
- **Hardware accelerated Video Motion Detection**: Video motion detection decoding takes advantage of processing power in Graphical Processing Units to significantly reduce the CPU load and improve performance of the recording servers. It requires CPU with support for Intel Quick Sync Video or NVIDIA card with compute architecture 3.x (Kepler) or newer
- **Centralized management:** A Management Client connected to the management server enables full remote system configuration of all recording servers, failover servers, devices, rules, schedules and user rights
- **High availability – failover recording servers:** A redundancy option for recording servers to ensure maximum system uptime while minimizing video interruption in the event of system problems. Operates in two failover modes: cold stand-by and hot stand-by
- **MOBOTIX HUB Interconnect:** A unique system concept that allows all appliances to be interconnected with a central MOBOTIX HUB L5 system to gain central surveillance operation across geographically dispersed sites
- **MOBOTIX Federated Architecture:** System concept that enables multiple individual MOBOTIX HUB L5 and MOBOTIX HUB L4 systems to be connected with a central MOBOTIX HUB L5 system in a hierarchical architecture for infinite scalability and central management
- **Alarm Manager:** Single-point alarm function that provides a consolidated and clear overview of security and system-related alarms
- **MOBOTIX HUB Video Wall:** Flexible and hardware independent video wall feature that seamlessly integrates with the Management Client and MOBOTIX HUB Desk Client
- Two-step verification: Prevents non-authorized people from accessing the system and protects against “man-in-the-middle” attacks
- **Centralized Search in Desk Client:** Dedicated tab for searching recording sequences, bookmarks, events, motion, alarms, vehicle[1], people[1], location[1] and LPR. These Search categories can be combined, and also with third party search agent plugins. Save search templates. Visualize location of Search result. Integrates with technology partner solutions.
- **Metadata support:** Supports reception, storage and export of metadata, including metadata from camera-resided video analytics and location data in Video Push from MOBOTIX HUB Mobile
- **Evidence Lock:** Secures availability of video for investigations by overriding normal video retention and grooming policies
- **Edge Storage with audio support:** Uses camera-based storage as a complement to the central storage in the recording servers, with flexible video retrieval based on time schedules, events or manual requests, including the ability to combine centrally and remotely stored video using Scalable Video Quality Recording™ (SVQR).
- **Secure multi-stage storage:** Unique data storage solution that combines superior performance and scalability with video data grooming for cost-efficient, long-term video storage, with the option to encrypt and digitally sign stored video and audio
- **Tiered management rights:** Makes it possible to assign partial management permissions to system administrators using the Management Client
- **64-bit recording servers:** Allow more cameras to be run on a single recording server
- **Intuitive map function:** Multi-layered and interactive maps display the location of every camera and offer control of the entire surveillance system. It also has seamless drag-and-drop integration with MOBOTIX HUB Video Wall
- **Pro Map:** Seamless geo-navigation supporting map services such as Bing, Google and OpenStreetMaps as well as geo-referenced GIS maps and CAD drawings, with drilldown possibilities to the classic maps
- **Bookmarking:** Allows users to mark video sections of interest and add descriptive notes for later analysis or sharing with other users
- **Multicast support:** Optimizes network load in systems with many users by sending one video stream per camera to multiple MOBOTIX HUB Desk Clients
- **Multiple language support:** Lets most operators use the system in their native language with support for 30 different languages, while the Management Client is available in 14 languages

[1] Limited to certain camera models that can perform video analytics and export ONVIF compliant metadata

- **Fast evidence export:**
  Deliver authentic evidence to public authorities by exporting video to various formats, including video from multiple cameras in encrypted MOBOTIX HUB format with dedicated player application included
- **Audit logs:**
  Enables extensive logging of all user system accesses, configuration changes and operator actions
- **Flexible user and rights management:**
  Strict privileges on management of users' access to functions and camera actions. Modular user management with support for basic user accounts to global user management with single sign-on Microsoft® Active Directory accounts.
- **Versatile rule system:**
  Facilitates the automation of different aspects of the system, including camera control, system behavior and external devices, based on events or time schedules
- **Customizable management user interface**
  Adaptable management user interface makes it possible to toggle the availability of functions on and off in the Management Client
- **System Monitor**
  Customizable real-time system monitoring dashboard and report function for proactive maintenance of the VMS installation
- **Virtual environment**
  Support for VMware and Hyper-V virtualization solutions (to exclude hardware acceleration which in not supported in a virtual environment)

Integration options

- The MOBOTIX HUB Integration Platform Software Development Kit (HUB SDK) enables seamless integration of video analytics algorithms and other third-party applications in MOBOTIX HUB Desk Client and Management Client
- Compatible with MOBOTIX HUB Transact and MOBOTIX HUB Retail, which integrate video surveillance with ATMs, point-of-sale (POS) and enterprise resource planning (ERP) systems for managing loss prevention and fraud
- Compatible with MOBOTIX HUB Access for video enabled physical security, which integrates with access control and intrusion systems
- Compatible with MOBOTIX HUB LPR for automatic reading and tracking of vehicle license plates
- Generic event integration enables easy and fast integration of third-party applications and systems via a simple message-based socket communication interface
- Supports MOBOTIX Open Network Bridge that enables full video interoperability in multivendor installations using a standardized ONVIF compliant video-out interface
- System configuration API enables external applications to make changes to the system's configuration
- Supports display of HUB SDK plug-in items on the Pro Map
- HUB SDK Mobile enables integrations to third party Mobile or Web applications
- MOBOTIX 's Driver Framework enables device manufacturers to develop their own drivers for MOBOTIX HUB using HUB SDK, enabling wider device support and deeper integration of cameras, IoT devices, and more.

Detailed Product Features

Recording server/failover recording server

System

- Simultaneous digital multi-channel MJPEG, MPEG4, MPEG-4 ASP, MxPEG, H.264 and H.265 video recording of IP cameras and IP video encoders without any software limitations on number of cameras per server
- Two-way audio allows users to transmit and record audio from connected microphones and audio from the operator's microphone to attached speakers
- Generic framework for receiving and storing metadata from compatible devices and clients
- Route traffic between multiple connected cameras and multiple clients requesting live view, playback and export
- Multicast one video stream to all MOBOTIX HUB Desk Clients. The infrastructure must support IGMP to reach remote networks
- Generic 360 dewarping. Dewarping allows the user to cover a wide area with a single device, but also to have a 'normal' view of an otherwise distorted or reversed image.
- Multi-live streaming gives the possibility to define multiple streams for live viewing with different properties. It optimizes MOBOTIX HUB Desk Client viewing performance according to the available bandwidth and view layouts, which is ideal for deployments with remote viewing. Number of streams supported is set by the camera driver[2]
- Adaptive streaming enables a lower resolution stream from the recording server to the Desk Client, Video Wall, Mobile Client or Web client when a high resolution is not required, i.e. when displaying video where the view items do not require high resolution streams
- A dedicated recording stream enables optimization stream properties (resolutions, encodings and frame rate) for video storage and forensic usage
- Secure high-speed recording database holding JPEG images or MPEG4, MPEG-4 ASP, MxPEG, H.264 or H.265 streams
- Flexible control of recording characteristics for MPEG4/H.264/H.265 streams, making it possible to toggle between recording key frames only or the full stream
- Record more than 30 frames per second per camera, limited only by hardware
- Recording quality depends entirely on camera and video encoder capabilities with no software limitations
- Possibility to import pre-event images recorded locally in camera or video encoder
- Pre-recording buffer (used for event/motion based recording) in RAM minimizes the disk read/write operations when no video is recorded
- Edge Storage with flexible retrieval enables video retrieval from camera storage based on time schedules, events or manual requests. This enables users to effectively retrieve video recordings across low-bandwidth connections
- Scalable Video Quality Recording™ (SVQR) enables seamless merging of video stored centrally in the recording server, and video retrieved from a camera associated edge storage, or interconnected system.
- Built-in, real-time, camera-independent motion detection with the ability to generate motion metadata for Smart Search
- The recording server runs as a Windows service under local system account or optional local Windows user or Microsoft Active Directory account with run-as-a-service privileges
- Port forwarding enables clients to access the recording servers from outside a network address translation (NAT) firewall
- Support for both IPv4 and IPv6 addressing
- 64-bit recording servers allow more cameras to be run on a single server unit
- Secure HTTPS camera connection on devices supporting HTTPS
- Adding devices on HTTPS
- Encrypted communication between Recording Server and services retrieving streaming data
- Digital signing of the recording server's video database can be used to verify that recorded video has not been modified or tampered with while stored in the MOBOTIX HUB L5 system or after export
- Remote Connect Services enable you to securely connect remote cameras across different types of private and public networks
- Video decoding takes advantage of processing power in Graphical Processing Units. This includes the GPU part of the Intel CPU (requires CPU with support for Intel Quick Sync Video) and in the GPU of additional external NVIDIA cards
- Functional recording server even if a recording storage area is unavailable. Continued recording of video from devices with available recording storage and live video on devices without available recording storage
- Support for shutdown of recording server if recording storage becomes unavailable, to enable fail over to take over
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High availability

- MOBOTIX HUB L5 offers two levels of redundancy on the recording servers: Cold and hot stand-by failover

[2] Please view list of supported devices and number of supported streams.

- Both mechanisms offer fully automatic and user transparent failover in the event of hardware or system failure, with automatic synchronization at system recovery
- Cold stand-by failover is a cost-efficient redundancy solution where one, or a group of, failover recording servers can act as backup to one or multiple recording servers
- Hot Stand-by failover is a high-security redundancy solution providing minimal interruption in recording and live streams, where a dedicated failover recording server is preconfigured for a recording server

Pan-tilt-zoom (PTZ)

- "Pass-through" control of manual PTZ operation from clients with user priority
- 32,000 PTZ priority levels for control of rights between different operators and automatic patrolling schemes
- Execute rule-based go-to preset position on events and patrolling
- Pause PTZ patrolling on event and resume patrolling after manual session timeout
- Import PTZ presets defined in the PTZ camera
- Rename imported PTZ presets

I/O and events

- Support for devices with one or more input and output ports
- Powerful rule processing engine for execution of start and stop actions triggered by events or time profiles

Setup and management

- Download and install the recording server from a web page on the management server. The recording server is completely managed via the Management Client and configuration changes are applied instantly while recording is in operation
- Selecting "Single computer" set up during the initial installation the system automatically performs certain configurations for an easier installation experience
- Local recording server configuration data is available during periods where the management server is inaccessible
- Recording server manager is available in the local console notification area (icon tray) for status messages, start/stop of the service and change of network settings

Client access

- Facilitate client access
- Clients are authenticated and authorized at the management server and use a session-limited access token to access the recording server
- System administrators controlling systems with multiple users can control access permission per client for each of the three MOBOTIX HUB clients, resulting in safer security access

Alerting and notification

- The system acts as a simple network management protocol (SNMP) agent that can generate an SNMP trap as a result of a rule activation

Logs

- Logging of system, audit and rule entries to the management server with local caching during offline scenarios.

Management server and Management Client

System

- Management server for user authentication logon, system configuration and logging
- Management Client for central administration of the system such as recording servers, devices, security, rules and logging
- All configuration and logs from the entire system are stored in a centralized Microsoft SQL database and accessible by the management server only
- Failover solution for the management server provides a resilient system solution based on Windows Server Clustering, ensuring high system availability
- Encrypted communication between Management Server and Recording Server'
- Management server manager is available in the local console notification area (icon tray) for status messages and to start/stop the service
- The management server runs as a Windows service under local system account or optional local Windows user or Microsoft active directory account with run-as-a-service privileges
- To register and validate your licenses, the system offers easy-to-use automatic or manual online activation via the Internet and alternatively, offline activation via email and web for closed surveillance networks
- Support for both IPv4 and IPv6 addressing

MOBOTIX HUB Interconnect

- System concept that interconnects all MOBOTIX MOBOTIX HUB video management software units to gain central operation and cost-effective management of geographically dispersed surveillance sites
- Intelligent video storage management makes optimal use of remote/central video storage and available network bandwidth with a choice to store video recordings remotely, centrally or combined with flexible revival of the remotely stored video
- Possibility to define time interval and bandwidth cap for upload of video from an interconnected site

- Enables the proactive detection of errors and cost-efficient management of connected sites by propagation of system status events and embedded remote management of connected system
- Ability to detect system problems and remotely manage interconnected sites reducing operational costs and the need for on-site visits.

MOBOTIX HUB Federated Architecture

- System concept that enables multiple individual MOBOTIX HUB L5 and MOBOTIX HUB L4 systems to be interconnected with a central MOBOTIX HUB L5 system in a hierarchical architecture for infinite scalability and central management
- Support for creating a federated hierarchy of sites running MOBOTIX HUB L5 and MOBOTIX HUB L4 2013 and newer
- Centralized management access to all federated sites
- Resilient architecture that allows the individual systems to function as autonomous sites in the event of network problems
- Site details (name, address, administrators and additional information) defined in the federated system is available in the site navigation

Storage

- Definition of one or more storage containers with individual archiving schemes and retention times. Recording capacity is limited only by disk space
- Each storage container is defined as live database and one or more optional archives, where the video data is moved from the live database to secondary disk systems or network drives. The archived data is still online and available for clients
- Archiving schemes define when video is archived to the next archiving stage in the storage container and how long the video data is retained before deletion
- Optional video data grooming possibility enables reduction of video recording data size by reducing the frame rate of the video data
- Ability to allocate individual devices to different storage containers
- Move a device or a group of devices between two storage containers
- Light and strong video database encryption option, using AES256 encryption algorithm
- Digital signing using SHA-2 helps ensure video integrity of video stored in the recording servers
- Storage overview gives instant indication of used vs. available storage in total and for individual cameras
- Manage maximum recording time for manual recordings

Devices

- Hardware wizard to add devices; automatically using Universal Plug and Play (UPnP) discovery, via IP network range scanning, or using manual device detection. All methods support automatic or manual model detection
- Wizard for swift replacement of malfunctioning devices with preserved configuration settings and recordings
- Wizard for easy moving of hardware devices (with attached cameras, microphones, speakers, inputs, outputs and metadata devices) between recording servers in runtime without losing settings, recordings, rules, permissions etc.
- Enable and disable devices if they are not used or are down for maintenance
- Adjust settings such as brightness, color level, compression, maximum bit rate, resolution and rotation per camera or camera group
- Select and configure video format, frames per second (FPS), resolution and quality for the video streams used per camera
- Select and configure one, or more, video streams per camera to be used for live viewing. Each stream can be in different video format, FPS, resolution and quality
- Adjustable group of pictures (GOP) length for MPEG4 H.264 and H.265 encoded video
- Assign camera shortcut number for easy operation by clients
- Optional preview window for immediate verification of video settings per camera or for a group of cameras
- Define multiple PTZ preset positions per camera
- Import PTZ preset positions from cameras
- PTZ scanning on supported devices
- Define multiple PTZ patrolling schemes with adjustable wait time between shifts and customizable transitions with disabling of motion detection to avoid false alarms
- Run multiple patrolling schedules per camera per day. For example, run different schedules for day/night/weekend
- Privacy masking conceals certain parts of the image, both in live and playback video and in exported material. It supports permanent masks and liftable masks that can be lifted and managed with user credentials. Masking level is adjustable and ranges between ‘light blur’ to ‘solid grey’
- Configure device events like motion detection with pre- and post-buffers, or input signal behavior options
- Fine-tune motion detection sensitivity per camera manually or automatically
- Apply one or multiple exclusion zones for where motion detection is to be disabled to avoid unwanted detection
- Manage device password on one or multiple devices from within the Management Client
- Initial setup of credentials on devices without factory default credentials increases the level of security in the customer’s system.

- User handling: Add/change VMS user account that communicates with the device. List and delete existing device's users.[3]
- Network configuration: enabling change of IP address, subnet mask, and default gateway for a device[3]
- Full list of devices, firmware versions and features supported by MOBOTIX can be found here https://hub.mobotix.com and drivers are available in Device Packs.

Rules, time profiles and notifications

- Powerful Microsoft Outlook®-style rule system supports an unlimited number of rules
- Rule actions can be triggered by event, time interval, time schedule (recurring, or a combination of event and time). Rules can be optionally stopped by an event or after a certain time
- Time profiles with reoccurring time selection and expire condition support an unlimited number of time profiles
- Dynamic day-length time profile follows daylight changes over the year for a given location defined by a GPS position, including daylight savings time
- Rule-based bookmark creation
- Play audio files on rule making it possible to automate announcements over speakers.
- Trigger events:
  The MOBOTIX HUB L5 VMS system and connected devices support a wide set of events that can be used to trigger actions using the rule system. Events are grouped in the following categories:
  - Hardware: events that relate to physical hardware devices connected to the system
  - Devices: events that relates to certain functions and states of devices available to the MOBOTIX HUB VMS system via the connected hardware devices
  - External Events: events that relate to VMS integrations
  - Recording server: events that relate to failover, archiving and database functions.
  - Analytics: events from integrated applications and systems
- For further details on available trigger events, please refer to the MOBOTIX HUB VMS Administrator's Manual.
- Start actions: The triggering events may initiate a wide set of actions in the VMS system, connected devices or integrated systems.
  For a complete list of available actions, please refer to the MOBOTIX HUB VMS Administrator's Manual
- Stop actions: The rule engine may also trigger stop actions in the VMS system, connected devices or integrated systems upon the completion of a rule.
  For a complete list of available stop actions, please refer to the MOBOTIX HUB VMS Administrator's Manual
- MOBOTIX HUB Video Wall start and stop actions; Set MOBOTIX HUB Video Wall to preset layout, set MOBOTIX HUB Video Wall monitor layout and camera content
- Multi-recipient customizable email notification with image and/or AVI attachment of incidents

User rights management

- Common and central management of all user rights across all user and programmatic (HUB SDK) interfaces
- Overall system security definition makes it possible to globally allow or deny permission to devices and functions (such as manage, read, edit and delete).
- Device-specific security definition makes it possible to allow or deny permission to individual devices and functions (such as manage, read, edit and delete).
- Tiered management rights enable differentiated administrator rights per administrator role
- Roles control user and administrator access to:
- General: Management Client and MOBOTIX HUB Desk Client profiles, Evidence Lock profile, dual authorization rights, system log-in time profile
- Cameras: visibility, administrate, live view (within time profile), playback (within time profile), search sequences, export, smart search, AUX commands, manual recording, bookmark functions, Evidence Lock functions
- Microphones and speakers: visibility, administrate, listen to live audio (within time profile), playback audio (within time profile), search sequences, export, manual recording, bookmark functions, Evidence Lock functions, speak to speakers
- Inputs and outputs: visibility, administrate, status, activation
- PTZ: manual control, activate PTZ presets, PTZ priority, manage PTZ presets and patrolling, lock/unlock PTZ presets, reserve and release PTZ session
- Remote recordings: retrieve remote recordings
- MOBOTIX HUB Video Wall: visibility, administrate, control, playback
- External events: visibility, administrate, trigger
- View groups privileges: MOBOTIX Federated Architecture site permissions
- Alarms: visibility of alarms and ability to manage alarms
- MIP: Plug-in permissions
- General application permissions: Management Client, MOBOTIX HUB Desk Client, MOBOTIX HUB Web Client and MOBOTIX HUB Mobile
- Scripting disable/enable option

Evidence Lock

- Management of retention time options
- Overview of locked video sequences

[3] Applicable only for devices integrated through the MOBOTIX ONVIF drivers and that are ONVIF Profile T & Q compliant

Logging

- Logs of system, audit and rule entries are consolidated from all recording servers and clients
- Each log file has adjustable size and time limitations

Management Client profiles

- Centralized management of Management Client application options enables optimization of the Management Client for different user categories and skill levels
- Ability to tailor the availability of main/sub functions in the Management Client for different user roles

MOBOTIX HUB Desk Client profiles

- Centralized management of MOBOTIX HUB Desk Client application options enables optimization of MOBOTIX HUB Desk Client for different user categories and skill levels
- Ability to enforce or recommend optional MOBOTIX HUB Desk Client application options for a user or group of users, using an unlimited number of MOBOTIX HUB Desk Client profiles
- Define general MOBOTIX HUB Desk Client application options, including (listing not exhaustive): visibility of time, visibility of camera live indicators, default image quality, default frame rate, keyboard and joystick setup, startup mode and de-interlacing filters
- Access to live mode and the availability of individual control panes and overlay buttons
- Access to playback mode and the availability of individual control panes, overlay buttons and settings for specific functions, such as default export path
- Access to setup mode and the availability of individual control panes and setup functions
- Access to Centralized Search, Alarm Manager, System Monitor
- Access to setup mode and the availability of individual control panes and setup functions
- Definition of available view layouts

System administration

- Built-in backup and restore support for manual system backup of all configuration data, including (listing not exhaustive): system configuration data, maps/Pro Maps, alarm settings and definitions and client views
- Configuration data and backup can be password protected, to enhance security around restore procedure.
- System monitor with customizable dashboard for task or component specific live monitoring
- Historic performance and usage investigation and reports of; storage usage, network use, server and camera performance
- Customizable Normal, Warning and Critical system monitor and event triggers for; CPU and Memory usage on servers, used space, recording and live FPS on cameras, free space on disks and predicated retention time for storage definitions
- Configuration Reporting enables complete or partial documentation of system configuration. Custom and site-specific free-text information, integrator's notes and logo can be added to the printer-friendly reports
- License administration
- License overview including add-on products, MOBOTIX HUB Advanced Services coverage and renewal date
- License owner information, that is synchronized with the software registration page on the MOBOTIX HUB website
- Expanded license information for multi-site installations where both the total used licenses for the common SLC is presented and the license use in the specific system
- License overview that presents the license use of all the individual sites running on the same SLC
- "Changes without activation" function that allow additions and replacements of limited number of hardware devices without requiring license activation

Authentication

- System log-in uses Microsoft Active Directory, local Windows or basic user account
- Use current Windows logon for authentication
- Dual authorization offers an optional additional level of system security, where Management Client users are granted access to the system only when a second user or supervisor has confirmed the log-in with a successful authorization of the second user
- Kerberos support enables deployment in high security Kerberos IT environments

Event Server

Alarm Manager

- Single-point alarm management of all internal system alarms and external security alarms
- Alarm descriptions and work instructions make alarms actionable for operators
- An alarm location map can be linked to each alarm providing instant situational awareness to the operator dealing with the alarm
- Customizable alarm priorities allow operators to focus on the most critical alarms
- Customizable alarm categories enable logical grouping of alarms dependent on their type and nature
- Customizable alarm statuses enable alignment of the alarm handling workflow with existing workflows and security systems
- Alarm handling result code enables tracking of the outcome of the alarms
- Automatic allocation to alarm owner with escalation and alarm forwarding possibilities
- Time profiles for definition of active alarms
- Possibility to associate one or more cameras to an alarm (maximum 15 cameras can be displayed simultaneously in the alarm preview window)

- A set of alarm handling reports gives valuable information about alarm inflow and alarm handling performance
- Extensive logging of alarms
- Microsoft Clustering support for the event server enables secure and redundant alarm handling

MOBOTIX HUB Mobile server

- The MOBOTIX HUB Mobile server runs as a dedicated service, allowing it to be installed either on the same server as other system components or on dedicated hardware in more demanding installations
- The MOBOTIX HUB Mobile server can serve video directly to the Web client/Mobile clients via the direct streaming feature. No transcoding to MJPEG requires which significantly reduces the load on the Mobile server
- The MOBOTIX HUB Mobile server can transcode video and can adapt to changing connection bandwidth as well as optimize the use of available bandwidth to get the best possible stream quality in the MOBOTIX HUB Web Clients and MOBOTIX HUB Mobile clients
- Adjustable transcoding logic enables capping of video resolution and frame rate for video streams provided to MOBOTIX HUB Web Clients and MOBOTIX HUB Mobile clients
- Adaptive streaming enables a lower resolution stream from the recording server/mobile server to the Web client when a high resolution is not required, i.e. when displaying video where the view items do not require high resolution streams
- The MOBOTIX HUB Mobile Server encodes audio in a format suitable for Web Client and Mobile Client, so users can play live or recorded audio.
- Installing the MOBOTIX HUB Mobile Server plugin in the Management Client will give access to MOBOTIX HUB Mobile Server management in order to change settings, read out miscellaneous status information, configure codecs used for exports as well as manage ongoing and completed exports
- MOBOTIX HUB Mobile servers can be installed in parallel, offering redundancy and/or allowing more simultaneous users
- MOBOTIX HUB Mobile servers can be configured through the tray controller to easily adjust or update settings
- Connect securely to the MOBOTIX HUB Mobile server using trusted CA certificates for HTTPS encryption. MOBOTIX HUB Mobile clients do not support self-signed certificates. Unencrypted HTTP connection is supported in the MOBOTIX HUB Mobile client
- Support for two-step verification for log-in
- Video Push configuration is done from the server, so users can push video via MOBOTIX HUB Mobile without having to apply any additional setting
- MOBOTIX HUB Mobile Server supports creating server-side export through MOBOTIX HUB Web Client and MOBOTIX HUB Mobile
- Video decoding in MOBOTIX HUB Mobile Server takes advantage of processing power in Graphical Processing Units. This includes the GPU part of the Intel CPU (requires CPU with support for Intel Quick Sync Video) and in the GPU of additional external NVIDIA cards
- Smart Connect enables easy configuration of internet access to the Mobile Server by automatic configuration of firewalls and internet routers via UPnP. Smart Connect also verifies the configuration and operation of the internet connection, and can be used to email connection details to Mobile client users[4]

DLNA server

- DLNA allows users to display video directly onto any DLNA supported tv without needing to have a PC nor a Desk Client. The function supports live video and camera selection can be manual, carousel or rule based
- The MOBOTIX HUB DLNA server runs as a dedicated service, allowing it to be installed either on the same server as other system components or on dedicated hardware in more demanding installations.
- The DLNA servers can be configured through the tray controller to easily adjust or update settings
- Installing the DLNA server plugin in the Management Client will allow the DLNA server management to change settings
- Supports more than one DLNA server
- The populated cameras on the DLNA interface can be set by an admin
- The DLNA functionality requires the selected cameras to be configured to use H.264

MOBOTIX HUB Desk Client

General

- Dedicated task-oriented tabs for the centralized Search, Alarm Manager and System Monitor, in addition to the traditional Live and Playback tabs
- Application theme support with choice of dark or light themes
- Multi-window support where secondary windows have full functionality and can be operated in independent mode or synchronized mode where they follow the control of the main window
- Shortcuts to select a specific window or specific camera in a window
- Camera search function promptly finds cameras, types of cameras and views in the system with the ability to create temporary views to display all or a subset of cameras matching the search criteria
- Display metadata bounding boxes from supported devices in live views and playback

[4] Use of Smart Connect require one MOBOTIX HUB Advanced Services

Customization

- Application options enables customization of the general behavior and look of the MOBOTIX HUB Desk Client
- The customization can either be made as individual personalization managed by each operator, or centrally enforced through Desk Client Profiles
- Simplified user interface with the possibility option to toggle between “Simple” and “Advanced” modes, where Advanced mode is default
- Control of general look & feel and navigation properties, such as color mode, camera title bar, grid sizes etc.
- Availability of control panes and functions in live and playback tabs, and in setup mode
- Information included in time line in playback tab
- Behavior and availability of L4 function
- Setup of keyboard short cuts and joystick controls
- Specific behavior of alarms and access control notifications
- Advanced application settings such as use of multicast, hardware acceleration, videos diagnostics overlay and time zone settings
- Application language

Live view

- View live video from 1-100 cameras per computer monitor/view
- Multiple computer monitor support provides a main window and any number of either floating windows or full screen views
- Live view digital zoom allows a full view of recordings while the operator can digitally zoom in to see details
- Adaptive streaming enables a lower resolution stream from the recording server to the Desk Client/Wall when a high resolution is not required, i.e. when displaying video in the Desk Client or Video Wall where the view items do not require high resolution streams
- Supports multiple view layouts optimized for 4:3 and 16:9 display settings in both landscape and portrait
- Independent playback capability allows for instant playback of recorded video for one or more cameras, while in live mode
- Centralized storage of shared and private camera views, enables coherent access to views across the system
- Possibility to instantly re-arrange cameras in views for optimized monitoring of incidents, with single click restore of original view
- Seamless access to cameras in interconnected and federated systems
- Instant camera placement in live view allows for instant replacement of cameras in a view, where new cameras can be placed in a particular view and positioned through a simple drag-and drop operation
- Update on “motion only” optimizes CPU use by allowing motion detection to control whether the image should be decoded and displayed
- Global hotspot function allows users to work in detail with any camera selected from any view
- Local hotspot function allows users to work in detail with a camera selected from the same view
- Carousel function makes a specific view item rotate between pre-defined cameras that are not necessarily present in the view at the same time. Operators can select default or custom display times for each camera, and they are able to manually switch to the next or previous camera in the carousel list
- Matrix function shows live video from multiple cameras in any view layout with customizable rotation paths, remotely controlled by computers sending matrix remote commands
- Import static or active HTML maps for fast navigation to cameras and to provide a good overview of premises
- Hide HTML page toolbar in HTML page views
- Activate matrix via graphical maps of premises using JavaScript or integrate with centralized access control systems
- The operator can assign outputs, PTZ presets and views as actions to joystick buttons and as keyboard shortcuts.
- Two-way audio support enables MOBOTIX HUB Desk Client to record and play live audio from camera-connected microphones and outgoing audio from the operator’s microphone to one or multiple camera speakers
- Adaptive de-interlacing option secures high video quality, based on the actual video content received. MOBOTIX HUB Desk Client can optionally apply a filter to areas of the image where jagged edges would otherwise show up
- Operators may start/stop manual recording on individual cameras, where the recording status is propagated to all MOBOTIX HUB Desk Client users active in the system

PTZ

- 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
- Manage PTZ presets and patrolling profiles
- Start, stop and pause patrolling
- View who have PTZ control and time to automatic release
- Lock PTZ control
- Take manual control of a PTZ camera that is running a patrolling scheme. After a timeout with no activity, the camera reverts to its scheduled patrolling scheme.
- 360° ImmerVision Enables® Panomorph lens technology. Support for dewarping using Immervision lenses only (a third-part plug-in is required for other lenses).

I/O and events

- Overlay buttons provide intuitive control of cameras, camera-integrated devices and other integrated systems directly from the camera view
- Manually trigger output port relay operation, for example when controlling gates
- Manually trigger events by activating a server-defined event from a list

Bookmarking

- Manually define quick or detailed bookmarks with the bookmark function
- Create bookmarks based on rules
- Bookmarks are shown in timeline with instant preview
- Listing and previewing of bookmarks in recording search
- Bookmark reports enable effortless incident documentation
- Direct video export of a bookmark reduces the time needed to prepare forensic video material

Playback

- Playback video from 1-100 cameras per computer monitor/view
- Advanced video navigation includes fast/slow playback, jump to date/time, single step and video motion search
- Integrated video timeline with time navigation and playback controls, including an integrated function to select a time interval for export, Evidence Lock or video retrieval from Edge Storage devices and interconnected systems
- Toggle between simple and advanced timeline mode
- Overview of recorded sequences and bookmarks
- Independent playback capability allows the independent playback of recorded video from one or more cameras
- Instant camera placement in playback view allows users to instantly replace cameras in a view, where a new camera can be placed in a particular view and position with a simple drag-and drop operation
- Digital zoom allows the operator to see magnified details in the recorded video

Export and print

- The snapshot function enables operators to produce instant visual documentation of a camera by saving the camera image to a file, or sending it directly to a printer
- The storyboarding function makes it possible to include video sequences from different or overlapping time intervals form different cameras in the one and the same export
- Export in MOBOTIX HUB format; including the standalone MOBOTIX HUB Desk Client - Player application for instant and easy viewing by authorities
- Export preview with looped playback
- Encryption and password protection of exported video material with a choice of following strong encryption algorithms: 56-bit DES 128, 192 and 256-bit AES
- Secure video evidence handling with a digital signature of exported video material that enables users to verify the video has not been modified or tampered with when viewing the export in the MOBOTIX HUB Desk Client – Player
- Create evidence material in media player format (AVI files), MKV format, or still image format (JPEG images)
- Disable re-export option to prevent undesirable distribution of sensitive evidence material
- Bulk camera export in multiple formats to multiple destinations, including direct export to optical media, results in more efficient video exports and more secure handling of evidence material
- Export comment function enables users to add general and/or camera-specific comments to a video export when exporting to MOBOTIX HUB format.
- In media player format comments can be added as pre/post slides
- Print incident reports including image, surveillance details and free-text user comments

Centralized Search

- Dedicated tab for centralized Search (replacing Sequence Explorer)
- Search categories are: video sequences, bookmarks, motion, alarms, events, people[5], vehicle[4], location[4] and LPR
- Multi-category Search combines several search categories and third-party search agents in the same search query.
- Visualize location of Search result
- Save search templates including camera list and time scope
- Search data from Technology partner solutions integrated with Search
- Easy application of filtering with dynamic update of search window
- Preview of selected search results with direct options for export of video, making bookmarks, exporting to pdf, and more
- Hide/show search results that are not matched on all search agents

Evidence Lock

- Allows manual extension of video retention time for a selected set of cameras in a given time interval,

[5] Limited to certain camera models that can perform video analytics and export ONVIF compliant metadata

where the operator selects an extended retention time from a pre-defined set of retention time options.
- Evidence Lock overrides defined retention and grooming policies
- Headline and details information can be added to locked video sequences to enhance the manageability
- Search, filter and listing functions provide an overview of locked video and allows MOBOTIX HUB Desk Client users to manage locked evidence, including editing comments, modifying the extended retention time and removing the Evidence Lock.
- Locked video can be exported though a single step operation

Map function

- Built-in map function in MOBOTIX HUB Desk Client provides intuitive overview of the system and offers integrated access to all system components
- Map images can be in standard graphic file formats including JPG, GIF, PNG and TIF
- Any number of layered maps such as city, street, building and room
- Instant camera preview on “mouse over” and one-click shows all cameras on map
- One-click function to open floating window with all cameras (maximum 25 cameras) on the map
- Depiction of camera view zones on map with clickable PTZ zones for instant PTZ control
- Easy drag-and-drop and point-and-click definition of: cameras, servers, microphones, speakers, I/O devices, hot-zones for map hierarchies, camera view zones and PTZ camera presets position view zones
- Integrated control of speakers, microphones, and events and output I/O control, including: doors, gates, light and access control systems
- Real-time status monitoring indication from all system components including cameras, I/O devices and system servers
- Graphical visualization of the system status through color coding
- Hierarchical propagation of status indications to higher ordered maps
- Different levels of status indications available (alarm, warning and errors)
- System performance data for cameras and servers including camera resolution, FPS, network use and disk space
- Ability to suppress status indications (such as error and warning) for a given device
- Possibility to edit device names in a map and assign map-specific names and references to devices in a map
- Map editing subject to user rights

Pro Map function

- Map function that provides seamless geo-navigation, with seamless drilldown across different layers
- Supports Bing, Google and OpenStreetMap map services
- Supports geo-referenced GIS maps (shapefiles)
- Supports geo-referenced CAD drawings (dwg and dxf files)
- Supports offline OpenStreetMap
- MOBOTIX HUB L5 installations using MOBOTIX Federated Architecture (MFA) can automatically add and place cameras from all sub-sites in Pro Map. Users can then seamlessly access all cameras throughout the entire MFA, regardless of the site’s location
- Ability for users to toggle different layers on and off in the map. Examples of such layers are cameras (names, view of field, name), quick links and different layers provided by the maps and drawings used (street names, buildings, etc.)
- Supports geo-referenced buildings with floor-level navigation for easy identification and operation of relevant cameras
- Supports geo-referenced floorplans inside buildings
- Configure cameras inside buildings, ensuring they are only shown on relevant floor-levels
- Location links enables quick navigation across different sites and locations
- Map links enables drilldown to existing classic MOBOTIX HUB Desk Client maps
- Instant one-click camera preview
- Easy multi-camera selection with camera preview
- Easy drag-and-drop and point-and-click definition of: cameras, camera field of view, location links and quick links
- Selection of 10 different camera icons
- Depiction of camera field of view on map
- Possibility to edit device names in a map and assign map-specific names and references to devices in a map
  Camera object aggregation preserves the overview when several cameras are closely located
- Visualize location of Search result
- Alarms on Pro Map

Camera navigator

- Provides consistent and comprehensive visual verification, ensuring easier tracking of moving objects in geographically complex environments
- Automatically displays thumbnail views of nearby cameras
- Add-on to the map application with no special configuration needed

Alarm Manager

- Dedicated dockable tab for the Alarm Manager
- Alarm list with extensive filtering capabilities and an alarm preview in both live and playback mode
- Extensive alarm sort and filtering functions allow operators to focus on most critical alarms
- Instant preview of primary and related cameras helps reduce the number of false alarms

- Tight integration with the map function allows operators to indicate and acknowledge active alarms in the map
- Alarm descriptions and work instructions make alarms actionable for operators
- Alarm escalation and alarm forwarding possibilities allow operators with appropriate skills to handle different alarms
- Alarm reports enable incident documentation
- Alarm location map presents the alarm operator with a map showing the alarm area when an alarm is selected
- Desktop alarm notification linked to alarm manager
- Alarm notification to a single or a groups of MOBOTIX HUB Mobile client users using Push Notifications
- Optional sound notifications for different alarm priorities for notification of new incoming alarm
- Alarm disabling option enables users to suppress alarms from a given device in a certain time period
- Instant access to both live and recorded video from the cameras that are related to the alarm
- Alarm handling reports give valuable information about alarm inflow and alarm handling performance
- Global common alarm list for all sites in a MOBOTIX Federated Architecture

Server Configurator

- Makes it easier to select and assign security certificates on the server/computer where it is running
- The security certificates for the Management Server, Recording Server and Mobile Server can be configured from the same place.

System Monitor

- Dedicated dockable tab with system performance and use information
- Dashboard for task or component specific live monitoring
- Historic performance and usage investigation and reports of; storage usage, network use, server and camera performance

Setup and management

- Download and install MOBOTIX HUB Desk Client from a web page on the management server
- Notification about new updates at log-in
- Application options allow users to adapt the layout and personalize the application to their particular preferences

Authentication

- System log-in uses Microsoft Active Directory, local Windows or a basic user account
- Use current Windows logon for authentication
- Auto-log-in and auto-restore views
- Dual authorization offers an optional additional level of system security, where MOBOTIX HUB Desk Client users are granted access to the system only when a second user or supervisor has confirmed the log-in with a successful authorization of the second user

System

- Support for IPv4 and IPv6 addressing
- 64-bit Windows® operating system support enables better performance when viewing and operating many cameras
- Support for multicast streams
- Hardware video decoding is done to significantly reduce the CPU load and improve performance of the recording servers. MOBOTIX HUB supports video decoding done in the GPU part of the Intel CPU (requires CPU with support for Intel Quick Sync Video) and in the GPU of additional external NVIDIA cards

MOBOTIX HUB Desk Client - Player

- Play back recorded or archived video and audio evidence, including edited storyboard exports
- Same user-friendly interface and most functions as MOBOTIX HUB Desk Client
- Offers a simplified user interface with the possibility option to toggle between “Simple” and “Advanced” modes, where Advanced mode is default
- 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
- Metadata bounding boxes included in exports are displayed time synchronized in MOBOTIX HUB Desk Client – Player
- The project tool allows users to merge video exports or archives from two different locations or MOBOTIX HUB systems together into one new export
- Generic 360 dewarping. Dewarping allows the user to cover a wide area with a single device, but also to have a ‘normal’ view of an otherwise distorted or reversed image.
- View up to 100 cameras time-synched during playback
- Camera search function promptly finds cameras, types of cameras and camera views in the system
- Scrollable activity timeline with magnifying feature
- Instant search on recordings based on date/time and activity/alarm (video motion detection)
- Evidence can be generated as a printed report, a JPEG image, an AVI or MKV film or in MOBOTIX HUB format
- Export audio recordings in WAV, MKV or AVI format
- Exported video can be digitally zoomed to view an area of interest and minimize export footprint size
- Re-export evidence containing MOBOTIX HUB format and MOBOTIX HUB Desk Client - Player for instant, easy viewing by authorities
- Verification of digital signatures added in the recording server, or as a part of the export, enables users to verify that the video has not been modified or tampered with

- Encryption and password protection of exported video material with a choice of the following strong encryption algorithms: 56-bit DES 128, 192 and 256-bit AES
- Secure video evidence handling with a digital signature of re-exported video material enables users to verify that the video has not been modified or tampered with when viewing the export in MOBOTIX HUB Desk Client – Player
- View, modify or add general and/or camera-specific comments for a given video export
- De-interlacing of video from analog cameras
- 360° panomorph lens technology

MOBOTIX HUB Web Client

- Access MOBOTIX HUB views through the browser and avoid advanced setup
- Shared views can be managed centrally via the server with administrator/user rights and user groups
- In live mode Adaptive streaming enables a lower resolution stream from the recording server to the Web Client when a high resolution is not required, i.e. when displaying video in the Desk Client or Video Wall where the view items do not require high resolution streams. Direct streaming supported meaning that the Web client can receive H.264 directly from the recording server without transcoding which is more efficient and provides a smoother experience
- Camera search function promptly finds cameras, types of cameras and camera views in the system
- Easy single/multi camera video playback including fast/slow playback, single frame step and jump to date/time with frame preview while adjusting time
- Investigation function with ability to save exports for later usage or download
- Users can quickly get an overview and act if needed via the list of alarms
- Control PTZ cameras remotely with PTZ mouse gestures, including preset positions
- Two-way audio support for playing and exporting live or recorded audio from device or camera-connected microphones. Use the camera's speaker to talk with a person in front of the camera, and at a later stage play back recorded audio
- Broadcast audio support for mass communication to multiple camera-connected speakers at once.
- Dynamic bandwidth optimization when streaming from server to client gives better use of bandwidth
- Create AVI, MKV or database export files
- Export on the server to avoid moving large video files back and forth. Only download needed files or save them for downloading when on a faster connection
- Preview exports on the server without downloading them
- Trigger outputs and events with live view of related camera
- System log-in using MOBOTIX HUB username and password
- System log-in using Microsoft Active Directory user
- Support for two-step verification for log-in
- Secure connection through HTTPS
- No installation needed on client computer

MOBOTIX HUB Mobile Client

- Supports any mobile device running Android® 6.0 or iOS11 or newer versions
- Add log-in credentials for multiple servers in MOBOTIX HUB Mobile to easily switch between sites or different connection addresses
- Direct streaming supported meaning that the Mobile client can receive H.264 and H.265 directly from the recording server without transcoding in the Mobile Server, which is more efficient and provides a smoother experience
- Adaptive streaming enables a lower resolution stream from the recording server to the Mobile Client when a high resolution is not required.
- Views are inherited from the connected MOBOTIX HUB VMS system. The client automatically obtains the user's private and shared views from the system to be used as camera lists in MOBOTIX HUB Mobile
- A view with all cameras is automatically generated, allowing MOBOTIX HUB Mobile to be used when no views are set up. It also provides a quick way of searching through cameras
- Camera search function promptly finds cameras, types of cameras and camera views in the system
- Cameras can be viewed in full screen to take better advantage of the device's screen. 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 conduct detailed investigation of video when using megapixel or high-definition cameras
- Play back recordings from the database, navigate recorded video using a flexible timeline control or 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 with MOBOTIX HUB Mobile either manually or by selecting predefined presets for quick navigation
- Video Push allows users to use their mobile devices' cameras as cameras in the MOBOTIX HUB VMS. Easy to use and requires no setup in the mobile device
- Option to include location metadata in Video Push
- Option to record audio during Video Push
- Two-way audio to play live or recorded audio from device or camera-connected microphones. Use the camera's speaker to talk with a person in front of the camera simply using the Push-To-Talk button. Push-to-talk communication is recorded and can be played back.

- Trigger outputs and events:
  Mobile devices can trigger outputs connected to the MOBOTIX HUB VMS, or user-defined events to have greater control while on the go
- Connect securely to the MOBOTIX HUB Mobile server using trusted CA certificates for HTTPS encryption. The MOBOTIX HUB Mobile client does not support self-signed certificates. Unencrypted HTTP connection is supported in MOBOTIX HUB Mobile Client.
- Export on the server to avoid moving large video files back and forth. Only download needed files or save them for downloading when on a faster connection
- Receive alarm notifications using Push Notifications, notifications include access to video, alarm information and instructions [6]
- Smart Connect with automatic Mobile Server discovery on LAN using UPnP, and easy connection via WAN to known Mobile servers without having to keep track of actual server addresses
- Investigation function to access investigations done in the Web client
- Support for two-step log-in verification

MOBOTIX HUB Video Wall

System

- Hardware independent, it runs on standard servers and displays. No special video wall hardware or network configurations required
- Flexible and scalable, it supports multiple MOBOTIX HUB Video Walls with an unrestricted number and combination of monitors at any location

Management

- Management of MOBOTIX HUB Video Wall is fully integrated with the Management Client
- Intuitive MOBOTIX HUB Video Wall builder enables easy definition of any number of MOBOTIX HUB Video Walls, including the size and position of individual monitors
- MOBOTIX HUB Video Wall presets provide powerful control of the layout (camera grid) and camera content
- All user actions are subject to the assignment of user rights

Control

- Dynamic user control of MOBOTIX HUB Video Wall layout and content through manual drag-and-drop of items from MOBOTIX HUB Desk Client – including; views, cameras, hotspots, carousels, maps, Pro Maps, still images, http pages, alarms, texts, bookmarks (bookmark image or looped bookmark playback), system monitor
- Automatic event-driven control of MOBOTIX HUB Video Wall layout and content based on rules, such as motion detection, I/O, integrated third-party applications, time, or video analytics events
- Layout control enables instant insertion of a camera in a specific monitor and position, changes of MOBOTIX HUB Video Wall monitor layout, setting of all (or some) of the monitors in MOBOTIX HUB Video Wall to a predefined layout and set of camera feeds
- Intuitive integration with the Pro Map function enables users to easily drag-and-drop cameras into MOBOTIX HUB Video Wall from the Pro Map
- Supports seamless manual or rule-based display of any camera in a distributed setup based on MOBOTIX Federated Architecture or MOBOTIX Interconnect
- Interactive and remote-controlled playback of recordings on the MOBOTIX HUB Video Wall

View

- Individual MOBOTIX HUB Desk Client users can view MOBOTIX HUB Video Wall views as a part of the available view selection, which also enables MOBOTIX HUB Video Wall to be used as an operator collaboration.

[6] Use of Push Notifications require MOBOTIX HUB Advanced Services

Miscellaneous

GDPR-ready seal

MOBOTIX HUB L5 is a GDPR certified product by obtaining EuroPriSe GDPR-ready seal.

FIPS 140-2 compliant mode

MOBOTIX HUB can be used in a FIPS 140-2 compliant mode.

Minimum system requirements

The following are minimum requirements for the computers used, please refer to:
http://hub.mobotix.com

Licensing structure

Server base license

- An MOBOTIX HUB L5 server base license is mandatory for installing the product
- The base server license permits the following deployments within the legal entity purchasing the base server license:
- Unrestricted number of Management Servers
- Unrestricted number of Recording Servers
- Unrestricted number of MOBOTIX HUB Desk Clients, MOBOTIX HUB Web Clients and MOBOTIX HUB Mobile applications

Hardware device license

MOBOTIX MOBOTIX HUB VMS products support IP devices. IP devices can be cameras, encoders, video services or other types of video and non-video devices that are addressed through a unique IP address in the applied installation of the Product. For IP devices with one IP address included in the MOBOTIX Supported Device List, one device license is needed per IP device connected to and enabled in the Product. For IP devices with more than one enabled IP address, the number of required device licenses is specified in the MOBOTIX Supported Device List. Please check the supported IP devices, the required number of licenses and the exceptions in the Supported Device List at https://hub.mobotix.com The following exceptions apply: (i) for IP devices connected to the Product through intermediate device or intermediate system one device license per enabled video channel is required; (ii) IP devices with multiple lens or sensors and encoders with up to 16 connected analog cameras, count as only one IP device; (iii) for encoders with more than 16 channels one device license per enabled video channel is required. Additional specific exceptions may apply, please refer to the MOBOTIX Supported Device List for the details.

For IP devices not included in the MOBOTIX Supported Device List, the following apply: (i) IP devices with video capabilities require one device license per enabled video channel, and (ii) IP devices without video capabilities require one device license per IP address. Specific license terms may apply for the specific MOBOTIX HUB VMS products, please refer to the Products' specific terms and conditions.

In total, for all copies of the product installed under this license, the product may only be used with hardware devices as you have purchased hardware device licenses for. An unlimited number of hardware device licenses can be purchased. To extend an installation with additional hardware device licenses, the base server license number (SLC) is required when ordering.

Licensing of MOBOTIX Interconnect

- One MOBOTIX Interconnect device license is required per device (camera) in an interconnected site that is enabled in the central MOBOTIX HUB L5 system

Licensing of MOBOTIX Federated Architecture

- The use of MOBOTIX Federated Architecture is free and not subject to licensing. This implies that an unrestricted number of sites and cameras can be included in the federated hierarchy, without the need for additional or special licenses

MOBOTIX HUB Video Wall application license

- MOBOTIX HUB Video Wall is an add-on product that is included in the base license of MOBOTIX HUB L5 2019 R3, which permits connection of an unrestricted numbers of MOBOTIX HUB Video Walls (including physical displays) and camera feeds

Advanced Audio Codec (AAC) license

- The use of AAC audio decoding within the MOBOTIX HUB Desk Client is licensed and requires a license per concurrent MOBOTIX HUB Desk Client. All MOBOTIX HUB VMS Base licenses (SLC's) for products supporting AAC audio include AAC licenses for 2 concurrent MOBOTIX HUB Desk Clients. Additional licenses can be purchased in packs of 50 if needed.

Intelligent Video Security Solutions

MOBOTIX offers a comprehensive range of solutions for all aspects of video-based security systems. We develop high-quality, decentralized, energy-efficient systems that mean our customers save money on every MOBOTIX system installed.

Our motto BeyondHumanVision is also our mission: MOBOTIX is fully committed to making itself the most reliable company it can be, one that protects people and property by using intelligent, cyber-secure video technology to go beyond human vision.

MOBOTIX

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