The Bosch Video Management System is a unique enterprise IP video security solution that provides seamless management of digital video, audio, and data across any IP network. It is designed to work with Bosch CCTV products as part of a total video security management system. You can integrate your existing components into one easy-to-manage system, or use our full-line capabilities and benefit from a complete security solution based on cutting-edge technology and years of experience.

The Bosch Video Management System allows a very flexible system design:

- **Compact: Single Site System**
  - 1 to 2000 cameras out of the box.
  - Only this system supports BIS-BVMS connectivity.

- **Enterprise: Multi Site-Single Customer**
  - Up to 10,000 cameras.
  - Supporting multi-site requirements for Metro, Airport and other large industrial facilities.
  - Consisting of individually configured servers.
  - Combined monitoring in Operator Client.

- **Enterprise: Multi Site-Multi Customer**
  - Up to 10 subsystems with a total of up to 10,000 cameras.
  - Up to 30 subsystems for <100 cameras per subsystem.
  - Enabled for legally different companies.

The Bosch Video Management System is installed on a Microsoft Windows Operating System. We recommend using Bosch Workstations and Servers. They are fully tested and optimized for Bosch Video Management System.

In addition to the Bosch ST standard terms and conditions of sale, the Bosch Software Maintenance Agreement is a great option to keep your VMS always up-to date.

It can be found in your online CCTV product catalog.

### System overview

Bosch VMS contains the following software components:

- Management Server software provides management, monitoring, and control of the entire system
- Enterprise Management Server provides access to multiple Management Servers
- Video Recording Manager (VRM) provides recording and playback management of video, audio, and data
- Configuration Client software provides the user interface for system configuration and management
- Configuration Wizard software provides easy and fast setup of a small recording system
- Operator Client software provides the user interface for system monitoring and operation
• Mobile Video Service provides a transcoding service. It transcodes the live and recorded video stream from a configured camera according to the available network bandwidth. This service enables video clients like an iPhone or a Web client to view high-quality images via low bandwidth.
• Mobile App: You can use the Mobile App on iPhone or iPad to access live and playback videos.
• Web Client: You can access live and playback videos via Web browser.
• Bosch Video Streaming Gateway: Provides the integration of ONVIF cameras.
• Remote access via public networks

Bosch Video Recording Manager (VRM) provides a Distributed Network Video Recorder solution, eliminating the need for dedicated NVRs. VRM provides load balancing and failover for the iSCSI Storage System and makes it easy to add additional iSCSI Storage Systems later on. VRM introduces the concept of a storage virtualization layer. This abstraction layer enables VRM to manage all of the individual disk arrays in the entire system as various “virtual” pools of storage, which are intelligently allocated as needed. The usage of multiple client workstations offers great scalability.

Bosch VMS manages 2,000 IP cameras / encoders per Management Server (up to 200,000 in Enterprise Systems). One Bosch VMS supports 100 workstations.

Functions

Cameras
• Supports Bosch MPEG4 & H.264 encoders, MPEG4 & H.264 IP cameras and IP AutoDome cameras in SD & HD format, decoders, DVRs, Allegiant, Bosch Recording Station (BRS)/DiBos, Bosch POS/ATM Bridge, and DiBos-compatible ATM Bridge
• Supported HD resolutions: 720p and 1080p, 5 Megapixel

Deployment
• Updates of Operator Client and Configuration Client automatically deployed from Management Server

Configuration
• Support of future BVIP cameras/encoders that are not supported yet
Bosch VMS retrieves the values of currently known functions on connection. Valid for firmware 5.70 or later
• Support of multiple VRM pools
• Enterprise System: Operator Client can access up to 30 Management Servers (maximum 100 cameras per Management Server) simultaneously
• Remote access: The target of remote access in Bosch VMS is to connect different private networks to public networks.
• Support of 3rd party cameras that are compliant to ONVIF Profile S
• Intelligent Video Analysis (IVA) and Forensic Search without servers

User Interface

• Web Client/iOS App for live and playback video
• Server Lookup: Access method for a user of Configuration Client or Operator Client to sequentially connect to multiple system access points. A system access point can be a Management Server or an Enterprise Management Server.
• Zoomable sitemaps with links, devices, sequences, and Command Scripts
• Automatic map positioning of a camera in a map when this camera is selected
• Sitemaps in DWF format are used. DWF format version 5.0 and 6.0 are supported.
• Up to 4 PC monitors supported per Workstation
• VideoTec DCZ keyboard supported, connected to Workstation via USB interface
VideoTec DCZ keyboard supports Enterprise System (select the desired Management Server)
• Bosch IntuiKey keyboard supported, connected to either Workstation or IP decoder
Bosch IntuiKey keyboard supports Enterprise System (select the desired Management Server)
• Flexible Image panes allow any combination of video window sizes and layouts
• Any live image pane can be switched to instant playback (not valid for transcoded streams)
• Multiple instant playback Image panes
• Image windows can display live video, instant playback video, text documents, maps, or web pages
• Device states shown by icons, including network-connection loss, video loss, and camera de-adjustment
• Favorites tree can be individually configured per user
• Favorites tree can include complete views with Image pane layouts and camera assignments
• Bookmarks in Live and Playback Mode for easy investigation and export of recordings
Selected clips can be exported to DVD, network drives, or USB sticks with a few mouse clicks
• Camera selection by double-click or drag and drop from site maps, Logical Tree, or Favorites Tree
• Decoders can be organized in Monitor Walls from within Operator Client
• Monitor Walls can be controlled without connection to Management Server
• Control of analog monitors connected to decoders via drag and drop
• Sophisticated multi-camera timeline allows easy, graphical searching of stored video

Connectivity to mobile clients (iPad and iPhone, App available in AppStore)
• Automatic scan of IP devices
• Automatic IP address assignment of IP devices
• Batch firmware updates of IP devices
• Configurable Logical Tree
• Pre-configured camera sequences with 25 cameras with each up to 100 steps with individual dwell times.
• “Automatic Sequences” created by multiple selection and drag and drop to Image panes
• 4 configurable user-events (can be triggered via menu command)
Timeline colors indicate recording status – normal recording, alarm recording, motion recording, protected recording, and audio recording (not for cameras managed by a VRM)

Operator Client can be located in another time zone than Management Server. Local time zone of Operator Client, UTC or time zone of the Management Server can be displayed.

Easy clip selection by dragging hairlines in the timeline

Post-recording motion search allows easy locating of changes in selected areas

Forensic Search allows the usage of Intelligent Video Analysis (IVA) algorithms on the recorded video

Two audio listening options – selected channel only, or multiple simultaneous channels

Audio Intercom functionality

4:3 and 16:9 Image panes

Continuous Operation for live, playback and export while Management Server disconnected

Live and Playback of the following recording engines: Video Recording Manager, Local Storage, Direct-iSCSI-Recording, Bosch Recording Station (BRS), Video Streaming Gateway (VSG). For legacy purposes the following recording engines are supported: DVR, NVR, DiBos, VIDOS (Live only).

Live and Playback via low bandwidth

Enable TCP for reliable connection (Live Mode)

Scheduling

Up to 10 Recording schedules with Holidays and Exception Days

Task Schedules with Holidays, Exception Days, and recurring schedule support

Per camera settings for minimum and maximum recording times

Per camera, per recording schedule frame rate and quality settings for live, normal recording, motion recording, and alarm recording

Event Handling

Compound events (combining events with Boolean logic)

Event duplication allowing separate handling

Event allocation to user groups

Schedule dependent event logging

Schedule dependent event-generated Command Script invocation

Alarm Handling

Schedule dependent alarm generation

Alarms can trigger alarm-mode recording for any cameras

100 alarm priorities

Selective auto-popup on alarm

Alarms displayed in separate alarm window

Up to 5 Image panes per alarm with live or playback video, sitemaps, documents, or web pages displayed in an “alarm row”, with highest priority alarms on top

Audio file per alarm

Workflow with user instructions and user comments, optionally forced before clearing

Email or SMS notification on alarm

Alarm display on Monitor Wall

Alarm auto clear options either time or state dependent

User Management

LDAP compatible for integration with user management systems such as Microsoft Active Directory

Access to system resources individually controlled per user group

Logical Tree customized per user group – users only see devices for which they have access

User group rights for protecting, deleting, exporting, and printing video

User group rights for Logbook access

User group priority assignment for PTZ control and Allegiant camera access

Individual per-camera privileges assignable per user group for live access, playback, audio, meta data display, dome control

Dual-authorization logon – special privileges and priorities granted when two users log on together

System Monitoring

System-wide health monitoring, including Bosch cameras, computers, software, and network equipment

Network equipment and other third-party devices monitored with SNMP

Customization and Interfacing

Server SDK controls and monitors Bosch VMS Management Server by scripts and external applications.

Client SDK controls and monitors Bosch VMS Operator Client by external applications and scripts (part of the related server configuration).

Client Enterprise SDK allows the behavior of Bosch VMS Operator Client of an Enterprise System by external applications.

Cameo SDK easily embeds the content of the Bosch VMS Image pane into clients of 3rd party Physical Security Information Management (PSIM) and other management systems.

Custom Command Scripts can control all system functionality

Powerful built in Command Script editor supporting C# and Visual Basic .Net

External software can trigger events and send metadata via “Virtual Inputs”

Any .Net programming language (for example C#) can be used to interface Bosch VMS functionalities

Other systems can control a virtual matrix with Allegiant CCL commands that can be sent via RS232

Compatible with Advantech ADAM-6000 series Digital Input / Output modules

Compatible with Bosch Building Integration System

Parts included

The Base Box is delivered with DVD and Quick Start Manual.

The DVD contains the following items:
  - Installation program that can selectively install all components (Management Server software, Video Recording Manager software, Configuration
Client software, Operator Client software, Video Streaming Gateway software, Mobile Video Services software) in all supported languages
- Configuration Manual (PDF format) in all supported languages (except Arabic)
- Operator’s Manual (PDF format) in all supported languages (except Arabic)
- Quick Start Manual in English, French, German, Simplified Chinese and Spanish

Licenses are provided as eLicenses via email.

**Technical specifications**

<table>
<thead>
<tr>
<th>System Specifications</th>
</tr>
</thead>
</table>
| Maximum number of workstations simultaneously viewing the same camera | Multicast: 50
Unicast: 5 |
| Supported GUI languages | English, German, Dutch, Italian, Portuguese, French, Spanish, Simplified Chinese, Traditional Chinese, Russian, Hungarian, Japanese, Czech, Danish, Finnish, Greek, Norwegian, Polish, Swedish, Thai, Turkish, Korean, and Arabic |

Anti-Virus software must not perform a full-scan. Performance may decrease depending on configuration.

| Event reaction time | <1 second, assuming sufficient network bandwidth |
| Alarm reaction time (incl. 1 live Image pane, 1 instant playback Image pane and 1 map Image pane): | Maximum 2 seconds, assuming sufficient network bandwidth |
| Bandwidth requirements for LAN | Min. 1 Gbps for connections between:
Operator Client to Management Server
Operator Client to VRM/Dibos
Management Server to NVR/VRM/Dibos |
| Bandwidth requirements for remote access | >= 300kbps |
| Hardware transcoder | Hardware transcoder VIP-XTCXF-INT or VJT-XTCXF must be configured in VRM, refer to VRM documentation.
Hardware transcoding only applicable for VRM connected BVIP cameras.
For transcoding live streams it is not required that the respective camera is recording. |

**Management Server Specifications**

| Maximum number of sustained events | For highest performance server: 500 events/s with Logbook
1000 events/s without Logbook
5000 events/s at peaks with Logbook |
| Logbook | Supported by SQL Server 2008 R2 (64-bit version)
4 GByte Logbook size |
| Management Server Redundancy | Available with VMware HA.
Please contact Bosch Design Engineer for redundancy solutions. |
| Maximum number of Task Schedules | 200 |

**System Specifications**

| Connection to VRM | LAN: port 1756
WAN: port 80 or port 443 as per default |
| Connection to Video Streaming Gateway | TCP port 8756 (VSG instance 1)
TCP port 8757 (VSG instance 2)
TCP port 8758 (VSG instance 3) |
| Connection to (Enterprise) Management Server | TCP ports 5390, 5392, 5393, 5395 |
| Connection to Operator Client Workstations by Bosch VMS SDK | TCP port (default 5394) |
| Connection from Management Server to SMTP (for email notifications) | TCP port 25 |
| Connection to Bosch encoders and decoders | Control channel: TCP ports 80 and 1756 (port 443 for encoders using https)
Network scan: UDP ports 1757 and 1758
Multicast detection: one selectable UDP port (default 1800)
Multicast video transmission: For each encoder audio or video stream, 1 selectable UDP port
Unicast UDP transmission: UDP ports dynamically assigned in the range from 1024 to 65000 |
| Connection between Management Server and DiBos (as of V.8.10, earlier versions need a patch for using Web service) | TCP port 808 |
| Connection between Operator Client and DiBos DVRs (uses DCOM) | TCP Port 135 plus four TCP ports and four UDP ports dynamically assigned in the range from 1025 to 65535
These ports are also used when Management Server and an old DiBos 8.9 or earlier without patch are connected. |

**Bandwidth requirements for remote access**

- Minimum 1 Gbps for connections between:
  - Operator Client to Management Server
  - Operator Client to VRM/Dibos
  - Management Server to NVR/VRM/Dibos
- >= 300kbps

**Hardware transcoder**

- Hardware transcoder VIP-XTCXF-INT or VJT-XTCXF must be configured in VRM, refer to VRM documentation.
- Hardware transcoding only applicable for VRM connected BVIP cameras.
- For transcoding live streams it is not required that the respective camera is recording.

**Required open ports**

- **Connection to VRM**
  - LAN: port 1756
  - WAN: port 80 or port 443 as per default

- **Connection to Video Streaming Gateway**
  - TCP port 8756 (VSG instance 1)
  - TCP port 8757 (VSG instance 2)
  - TCP port 8758 (VSG instance 3)
**VRM Specifications**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Version</td>
<td>3.0  Previous versions are not supported.</td>
</tr>
<tr>
<td>Maximum count of VRM servers per Management Server</td>
<td>40</td>
</tr>
<tr>
<td>Maximum data rate per iSCSI</td>
<td>Please contact Bosch Design Engineer for iSCSI storage solutions.</td>
</tr>
<tr>
<td>Max. number of playback sessions</td>
<td>64</td>
</tr>
</tbody>
</table>

**Minimum Client Workstation PC Requirements**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operation System</td>
<td>Windows 7 Professional or Ultimate SP1 64 bit version (required for &gt; 500 cameras)  Windows XP Service Pack 3 (32-bit only) for &lt; 500 cameras</td>
</tr>
<tr>
<td>CPU</td>
<td>Intel Core 2 Duo</td>
</tr>
<tr>
<td>RAM</td>
<td>2 GB or greater 4 GB or greater for Enterprise Operator Clients</td>
</tr>
<tr>
<td>Free disk space</td>
<td>3 GB or more for Single Site Systems 5 GB or more for Enterprise Systems  We recommend having minimum 15% free disk space.</td>
</tr>
<tr>
<td>Network card</td>
<td>1000Base-T</td>
</tr>
<tr>
<td>Display Resolution</td>
<td>Minimum per monitor 1024x768, 1280x1024 or greater recommended</td>
</tr>
<tr>
<td>Recommended Graphic Cards</td>
<td>MHW-AWGC-Q2000  MHW-AWGC-Q600  MHW-AWGC-Q4000  MHW-AWGC-Q5000  AMD Fire Pro V7900 (not available as separate graphic card)</td>
</tr>
</tbody>
</table>

**Minimum Management Server PC Requirements**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operation System</td>
<td>Windows 2008 Server R2 SP1 (64-bit) required for &gt; 500 cameras Windows 7 Professional or Ultimate SP1 (64-bit only) required for Management Server, Configuration Client and Operator Client on the same computer, and maximum 500 IP cameras/encoders Window 2003 Server R2 SP2 (32-bit only) for NVR only</td>
</tr>
<tr>
<td>CPU</td>
<td>Intel Core 2 Duo  Intel Core 2 Quad for systems &gt; 500 cameras</td>
</tr>
<tr>
<td>RAM</td>
<td>4 GB or greater 8 GB for systems &gt; 500 cameras</td>
</tr>
<tr>
<td>Free disk space</td>
<td>15 GB or greater  We recommend having minimum 15% free disk space.</td>
</tr>
<tr>
<td>Network card</td>
<td>1000Base-T</td>
</tr>
<tr>
<td>Display Resolution</td>
<td>1280 x 1024</td>
</tr>
</tbody>
</table>

**Minimum VRM Server PC Requirements**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU</td>
<td>Dual-Core Intel Xeon Processor 5110 (1.60 GHz, 1066 FSB) to Quad-Core Intel Xeon Processor E5430 (2.66 GHz, 1,333 FSB)</td>
</tr>
<tr>
<td>RAM</td>
<td>Minimum 2 GB</td>
</tr>
<tr>
<td>Free disk space</td>
<td>500 MB  We recommend having minimum 15% free disk space.</td>
</tr>
<tr>
<td>Network card</td>
<td>1000Base-T</td>
</tr>
<tr>
<td>Display Resolution</td>
<td>1024x768 or greater</td>
</tr>
</tbody>
</table>

**Mobile / Web Client Requirements**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Link to App Store</td>
<td><a href="http://www.boschsecurity.com/MobileVideoService">www.boschsecurity.com/MobileVideoService</a></td>
</tr>
<tr>
<td>Maximum number of Mobile Video Service instances per Management Server</td>
<td>5</td>
</tr>
</tbody>
</table>

**Maximum Graphic Cards Specifications**

Detailed information on the maximum number of Image panes and the CPU load for various workstations or servers and graphic cards in the Application Guide “Display performance indication”.

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**Network card**

1000Base-T

**Display Resolution**

1280 x 1024
<table>
<thead>
<tr>
<th>Number of simultaneous connections per Mobile Video Service (1 mobile device consumes 1 connection, each stream consumes another connection)</th>
<th>up to 20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Server for Mobile Video Service</td>
<td>Windows Server 2008/R2 or Windows 7 SP1 Professional or Ultimate 64-bit versions</td>
</tr>
<tr>
<td>Supported cameras</td>
<td>IP cameras with H.264 or H.263 support that are controlled by Bosch VMS (not controlled by VIDOS) ONVIF cameras BRS/DiBos/DVR cameras</td>
</tr>
<tr>
<td>iOS Version for iPhone/iPad</td>
<td>6.1.2</td>
</tr>
<tr>
<td>Hardware version iPad</td>
<td>iPad, iPad 2, iPad 3rd generation</td>
</tr>
<tr>
<td>Hardware version iPhone</td>
<td>iPhone 4, iPhone 4S, iPhone 5</td>
</tr>
<tr>
<td>Browser (Web Client)</td>
<td>Internet Explorer 9.0</td>
</tr>
</tbody>
</table>

### Minimum NVR Server PC Requirements

<table>
<thead>
<tr>
<th>Operation System</th>
<th>Windows XP Professional, SP3 (32-bit only), Windows 2003 Server, R2 SP2 (32-bit only) Windows 7 and Windows Server 2008 not supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU</td>
<td>Intel Core 2 Duo</td>
</tr>
<tr>
<td>RAM</td>
<td>2 GB or greater</td>
</tr>
<tr>
<td>Free disk space</td>
<td>500 MB + Video Storage We recommend having minimum 15% free disk space.</td>
</tr>
<tr>
<td>Hard disk drives</td>
<td>Minimum: separate partition for video storage Separate drive for video storage recommended</td>
</tr>
<tr>
<td>Network card</td>
<td>1000Base-T</td>
</tr>
<tr>
<td>Display Resolution</td>
<td>1024x768 or greater</td>
</tr>
</tbody>
</table>

### Device Compatibility

| Barco Monitor Wall | Barco RCPPlusAgent.exe 2.0.6.12 for Barco Monitor Wall |
| Analog Matrix Switch | Bosch Allegiant series, firmware 8.75 or later and Master Control Software version 2.92 |
| CCTV Keyboard | VideoTec DCZ keyboard (USB keyboard) Bosch IntuiKey keyboard, firmware version 1.96 |
| Digital I/O | Digital I/O Advantech ADAM-6050, ADAM-6052, ADAM-6060, ADAM-6066 |
| Digital Video Recorder | DVR 431, 440, 451, 480, 630, 650, 670, 700 series (maximum 15 DVRs per Management Server) Bosch Recording Station 8.10, 8.11 DiBos, firmware version 8.7 |

### Maximum 100 BRS/DiBos recorders per Management Server

| USB to Serial adapter | Belkin serial adapter cable F5U103vea |
| Ethernet to Serial adapter | Comtrol DeviceMaster RTS 4-Port |
| BVIP Devices | VIP-X Series encoders and cameras H.264 Series encoders and cameras MPEG-4, H.264 Main Profile, H.264 Baseline Plus are supported (H.264 Baseline and MPEG-2 not supported) |
| Connectivity with Building Integration System | Version 2.5 TU1 and 3.0 |

### Remote Access

<table>
<thead>
<tr>
<th>Remote Access</th>
<th>Direct iSCSI and encoder replay is not supported.</th>
</tr>
</thead>
<tbody>
<tr>
<td>VRM</td>
<td>x x x</td>
</tr>
<tr>
<td>VSG</td>
<td>x x x</td>
</tr>
<tr>
<td>ONVIF</td>
<td>x (via VSG) x (via VSG) x (via VSG)</td>
</tr>
<tr>
<td>Local Storage</td>
<td>x - x</td>
</tr>
<tr>
<td>Live Only</td>
<td>x - x</td>
</tr>
<tr>
<td>BRS/DiBos</td>
<td>- - -</td>
</tr>
<tr>
<td>NVR</td>
<td>x - -</td>
</tr>
<tr>
<td>DVR</td>
<td>x x x</td>
</tr>
</tbody>
</table>

### Ordering Information

#### Demoversion - Non Expandable

Supports 3 Cameras, 2 Workstations, 2 CCTV Keyboards, 2 DVR
1 Forensic Search license included.
Order number MBV-BDEM-45

#### Customer Demo Edition 30 days

Supports 1 Enterprise Management Server, 2 subsystems (Management Servers), 32 Cameras, 5 Workstations, 2 DVRs, 5 CCTV Keyboards, 1 Mobile Video Service, 1 ATM, 1 POS, 1 Allegiant, 1 OPC Server 5 Forensic Search licenses included.
Order number MBV-BCDM30-45

#### Customer Demo Edition 180 days

Supports 1 Enterprise Management Server, 2 subsystems (Management Servers), 32 Cameras, 5 Workstations, 2 DVRs, 5 CCTV Keyboards, 1 Mobile Video Service, 1 ATM, 1 POS, 1 Allegiant, 1 OPC Server 5 Forensic Search licenses included.
Order number MBV-BCDM180-45
Lite-32-Edition - Non Expandable
Supports 32 Cameras, 2 Workstations, 1 CCTV Keyboard, 0 DVRs – Non Expandable
1 Forensic Search license included.
Order number MBV-BLIT32-45

Upgrade BLITE32 to BPro w. 32 channels
License to upgrade from any installed MBV-BLite-32 version to the current Bosch VMS Professional version with 32 channels.
Note: Computer hardware ID of installed MBV-BLite-32 needs to be provided with the order.
Order number BVMS-LITEPRO-32

Lite-64-Edition - Non Expandable
Supports 64 cameras, 4 Workstations, 2 CCTV Keyboards, 0 DVRs – Non Expandable
2 Forensic Search licenses included.
Order number MBV-BLIT64-45

Professional Edition
Supports 8 Cameras, 2 Workstations, 1 CCTV Keyboard, 1 DVR
All MBV-X* and MBV-F* can only be combined with the Professional Edition.
1 Forensic Search license included.
Order number MBV-BPRO-45

Enterprise System
Supports 1 Enterprise Management Server, 2 subsystems (Management Servers), 2 Workstations, 1 CCTV Keyboard
Order number MBV-BENT-45

Enterprise Upgrade for Pro
Supports 1 Management Server to be upgraded to an Enterprise Management Server
Order number MBV-FEUP-45

1 Channel Expansion
Expansion, order the exact number required.
For example, if you order 128 units you can use 128 cameras/decoders in your Bosch VMS. Only those cameras need to be counted which are shown in the Logical Tree.
Order number MBV-XCHAN-45

1 Workstation Expansion
Expansion, order the exact number required.
Order number MBV-XWST-45

1 DVR Expansion
Expansion, order the exact number required.
Order number MBV-XDVR-45

1 CCTV Keyboard Expansion
Expansion, order the exact number required.
Order number MBV-XKBD-45

1 Forensic Search Expansion
Expansion, order the exact number required. You need one license per Workstation, not per camera or encoder.
Order number MBV-XFOREN-45

Enterprise Subsystem Expansion
Supports 1 Management Server as member of an Enterprise System
Order number MBV-XSUB-45

Mobile Video Service Expansion
Order number MBV-XMVS-45

Allegiant Matrix Connection
Order number MBV-FALG-45

ATM/POS Connection
Order number MBV-FATM-45

OPC Server Connection for BIS
Order number MBV-FOPC-45

Base Box
Hard cardboard box including DVD and Quick Start Manual (in English, French, German, Simplified Chinese, and Spanish)
Order number MBV-BBOX

Expansion Box
Paper box including Setup DVD
Order number MBV-XBOX

Services
Maintenance Demoversion
Order number MBV-MDEM

Maintenance Lite-32-Edition
Order number MBV-MLIT32

Maintenance Lite-64-Edition
Order number MBV-MLIT64

Maintenance Professional Edition
Order number MBV-MPRO

Maintenance Enterprise Edition
Order number MBV-MENT

Maintenance Enterprise Subsystem Expansion
Order number MBV-MSUB

Maintenance Mobile Video Service
Order number MBV-MMVS

Maintenance Enterprise Upgrade for Pro
Order number MBV-MEUP

Maintenance Channel Expansion
Order number MBV-MCHAN
Maintenance Workstation Expansion
Order number MBV-MWST

Maintenance DVR Expansion
Order number MBV-MDVR

Maintenance CCTV Keyboard Expansion
Order number MBV-MKBD

Maintenance Forensic Search Expansion
Order number MBV-MFOREN

Maintenance Allegiant Matrix Connection
Order number MBV-MALG

Maintenance ATM/POS Connection
Order number MBV-MATM

Maintenance OPC Server Connection
Order number MBV-MOPC