BVMS Plus is a unique IP video security solution that provides seamless management of digital video, audio, and data across any IP network. It provides the best video management system to go with Bosch video surveillance devices, leveraging the unique capabilities of Bosch cameras and recording solutions. It nevertheless offers interfaces and standards to integrate other systems and manufacturers.

The software is provided as an e-license via e-mail.

**Regulatory information**

**General Data Protection Regulation**
The General Data Protection Regulation (GDPR) is enforced on the 25th of May 2018. As a regulation it will be directly applicable to all EU member states without the need for national implementing legislation. As information captured, processed and stored by video surveillance systems is classified as "sensitive" the GDPR will cause significant impact on the video surveillance installations throughout Europe. BVMS includes the required functionality to ensure an organization can be GDPR compliant.

### Installation/configuration notes

The BVMS system design guide is published on the following website: [Bosch Building Technologies Knowledge Base](https://www.bosch-pt.com/solutions/building-technologies). The system design guide summarizes the BVMS design details, and serves as a guide to planning a BVMS system with Bosch cameras and storage. It focuses on BVMS combined with the VRM.

To get started, read the following article on the Bosch Security & Safety community website: [BVMS - Quick start overview](https://www.bosch-security.com/community/articles/bvms-quick-start-overview).

**BVMS Enterprise**
Multiple BVMS Lite, Plus, Professional or DIVAR IP systems can be combined into one BVMS Enterprise System.

<table>
<thead>
<tr>
<th>Cameras within system context</th>
<th>200000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cameras per operator</td>
<td>10000</td>
</tr>
<tr>
<td>Sub-systems</td>
<td>Between 10 sub-systems with 1000 cameras per system or 100 sub-systems with 100 cameras per system.</td>
</tr>
</tbody>
</table>
Software assurance

The complexity of security systems has increased significantly over the last couple of years. At the same time, you are still relying on your system to mitigate security risks. With Bosch Software Assurance, you can relax knowing you can always approach us for help to ensure your system keeps on running. You can find the terms and conditions of Bosch Software Assurance on the following website:

About Bosch Software Assurance

Technical specifications

The release notes give a detailed overview on the changes that are implemented, compared to the previous BVMS version. The architects and engineering specifications specify in detail what the system is capable of. Both documents can be found on the following webpage:

Bosch Building Technologies Knowledge Base

System limits

Notice

The system limits are based on the hardware recommendations.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum number of workstations</td>
<td>20</td>
</tr>
<tr>
<td>Maximum number of cameras</td>
<td>256</td>
</tr>
<tr>
<td>Maximum number of live and playback sites</td>
<td>10</td>
</tr>
<tr>
<td>Maximum number of intrusion panels</td>
<td>10</td>
</tr>
<tr>
<td>Maximum number of DVRs</td>
<td>10</td>
</tr>
<tr>
<td>Maximum number of VRMs</td>
<td>2</td>
</tr>
<tr>
<td>Maximum number of sustained events (logbook) / sec</td>
<td>500</td>
</tr>
<tr>
<td>Maximum number of sustained events (without logbook) / sec</td>
<td>2500</td>
</tr>
<tr>
<td>Maximum peak event load / sec (within 60 minutes)</td>
<td>5000</td>
</tr>
<tr>
<td>Maximum number of events / sec from ONVIF cameras</td>
<td>500</td>
</tr>
<tr>
<td>Logbook size</td>
<td>4GB</td>
</tr>
</tbody>
</table>

Notice

The logbook size can be increased by upgrading the Microsoft SQL Server Express edition included in the BVMS installation package.

Languages

<table>
<thead>
<tr>
<th>Component</th>
<th>Languages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quick installation guide</td>
<td>English, French, German, Simplified Chinese and Spanish</td>
</tr>
<tr>
<td>Configuration manual</td>
<td>English, German, Dutch, Italian, Portuguese, Finnish, French, Spanish, Simplified Chinese, Traditional Chinese, Russian, Czech, Greek, Polish, Swedish, Latvian, Lithuanian, Turkish and Korean</td>
</tr>
<tr>
<td>Operation manual</td>
<td>English, German, Dutch, Italian, Portuguese, Finnish, French, Spanish, Simplified Chinese, Traditional Chinese, Russian, Czech, Greek, Polish, Swedish, Latvian, Lithuanian, Turkish and Korean</td>
</tr>
<tr>
<td>Software</td>
<td>English, German, Dutch, Italian, Portuguese, Finnish, French, Spanish, Simplified Chinese, Traditional Chinese, Russian, Hungarian, Japanese, Czech, Danish, Finnish, Greek, Norwegian, Polish, Swedish, Thai, Turkish, Korean, Arabic, Ukrainian and Vietnamese</td>
</tr>
</tbody>
</table>

Hardware recommendations

Cameras

All Bosch cameras can be used under the device compatibility concept, which you can find on the Bosch Security and Safety Community in the following article:

How-to: BVMS - Device compatibility

BVMS is an ONVIF Profile S certified video management system.

Management Server, Video Streaming Gateway, Video Recording Manager, and Mobile Video Service

It is recommended to run the Video Recording Manager and the BVMS Management Server on the same computer. The recommended specifications for BVMS Plus are based on the Bosch DIVAR IP AIO 7000.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating System</td>
<td>Windows Server 2012 R2 (64-bit)*</td>
</tr>
<tr>
<td></td>
<td>Windows Server 2016 (64-bit)</td>
</tr>
<tr>
<td></td>
<td>Windows Server 2019 (64-bit)</td>
</tr>
<tr>
<td></td>
<td>Windows Server 2022 (64-bit)</td>
</tr>
<tr>
<td></td>
<td>Windows 10 Professional (64-bit) (22H2)**</td>
</tr>
<tr>
<td></td>
<td>Windows 10 Enterprise (64-bit) LTSC (21H2)**</td>
</tr>
</tbody>
</table>
**Item** | **Description**
---|---
Windows 11 Pro (64-bit) (22H2)** | **(Multicast) Maximum number of workstations simultaneously viewing the same camera** 100

CPU | Intel Xeon E3-1275 V3 (3.5 GHz, 4-core)

RAM | 8GB

Free disk space | 30GB (+ 15% of the hard-drive after installation)

Network | 1 Gigabit/s network interface card

* Windows Server 2012 R2 (64-bit) is only supported for DIVAR IP 7000 R2. Audit Trail is not available for this platform.

** Windows 10 and Windows 11 are not supported for the Video Recording Manager.

### Operator Client

**Item** | **Description**
---|---
Operating System | Windows 10 Professional (64-bit) (22H2)
 | Windows 10 Enterprise (64-bit) LTSC (21H2)
 | Windows 11 Pro (64-bit) (22H2)

CPU | Intel Xeon W-2123 (3.6 GHz)

RAM | 8GB

Free disk space | Minimum 10GB for Single Site Systems
 | Minimum 15GB for Enterprise Systems

Network | 1 Gigabit/s network interface card

Display resolution | Minimum: 1280 x 1024
 | Maximum: 3840 x 2160

Graphic card | Nvidia Quadro P620
 | Nvidia Quadro P2000
 | Nvidia Quadro P4000
 | Nvidia Quadro RTX A2000
 | Nvidia Quadro RTX 4000
 | Nvidia Quadro P2200
 | Nvidia Quadro T600
 | Nvidia Quadro T1000
 | Intel HD Graphics 630

### Network

**Notice**

When the system does not have enough network resources, or is experiencing a temporary decrease in network performance, the event response time and alarm visibility time may increase.

**Notice**

The list of communication channels and required network ports can be found in the BVMS Configuration manual.

### Storage devices

The storage quick selection guide, which also includes non-Bosch storage devices, can be found on: [http://www.boschsecurity.com/bvms](http://www.boschsecurity.com/bvms)

**Device** | **Series**
---|---
Bosch DIVAR IP | 2000, 3000, 5000, 6000, 7000
Bosch DIVAR IP AIO | 4000, 5000, 6000, 7000
Bosch DSA E-Series | 2300, 2400, 2500, 2600, 2700, 2800
Bosch DIVAR AN | 3000, 5000
Bosch DIVAR network | 2000, 3000, 5000
Bosch DIVAR hybrid | 3000, 5000

### Other hardware

**Type** | **Device** | **Remarks**
---|---|---
Decoder | Bosch VIDEOJET decoder 3000 | n/a
Decoder | Bosch VIDEOJET decoder 7000 | n/a
Decoder | Bosch VIDEOJET decoder 8000 | Supports displaying of 4K cameras
Decoder | Bosch VIDEOJET decoder 7513 | n/a
Decoder | Bosch VIDEOJET decoder 7523 | n/a
Foyer card reader | MINITER 485 | n/a
<table>
<thead>
<tr>
<th>Type</th>
<th>Device</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serial input</td>
<td>Werner Electronic DTP3N</td>
<td>n/a</td>
</tr>
<tr>
<td>Intrusion panel</td>
<td>Bosch G-series B9512G 3.03.14, B5812G 3.03.14, B5512 3.03.14, B4512 3.03.14, B3512 3.03.14, Bosch B6512 3.03.14</td>
<td>Automation Device in the intrusion panels must be configured as Mode 2</td>
</tr>
<tr>
<td>Intrusion panel</td>
<td>Bosch D9412GV4 2.03.018, D7412GV4 2.03.018</td>
<td>Microsoft Windows Patch 3155464 should not be installed</td>
</tr>
<tr>
<td>Monitor wall</td>
<td>Barco Transform N series</td>
<td>RCPPlus agent 0.9.5.0</td>
</tr>
<tr>
<td>Analog matrix switch</td>
<td>Bosch Allegiant Series</td>
<td>Firmware 8.75 or later, Master control software 2.94</td>
</tr>
<tr>
<td>ATM/POS Bridge</td>
<td>Bosch ATM/POS Bridge</td>
<td>Version 1.10.00.12</td>
</tr>
<tr>
<td>Keyboard</td>
<td>Bosch KBD-Universal XF</td>
<td>USB</td>
</tr>
<tr>
<td>Keyboard</td>
<td>Bosch Intuikey</td>
<td>Serial, firmware 1.96</td>
</tr>
<tr>
<td>Digital I/O</td>
<td>Advantech ADAM-6050,</td>
<td>n/a</td>
</tr>
<tr>
<td>Digital I/O</td>
<td>Advantech ADAM-6052,</td>
<td></td>
</tr>
<tr>
<td>Digital I/O</td>
<td>Advantech ADAM-6060,</td>
<td></td>
</tr>
<tr>
<td>Digital I/O</td>
<td>Advantech ADAM-6066</td>
<td></td>
</tr>
<tr>
<td>USB to serial</td>
<td>Belkin serial adapter F5U103VEA</td>
<td>n/a</td>
</tr>
<tr>
<td>Ethernet to serial</td>
<td>Comtrol DeviceMaster RTS 4-port</td>
<td>n/a</td>
</tr>
<tr>
<td>LPR camera</td>
<td>Tattile Vega Basic,</td>
<td>n/a</td>
</tr>
<tr>
<td>LPR camera</td>
<td>Tattile Vega Smart</td>
<td></td>
</tr>
<tr>
<td>LPR camera</td>
<td>Tattile Vega 1</td>
<td></td>
</tr>
</tbody>
</table>

**Ordering information**

**MBV-BPLU License Plus base**
Includes 8 camera/decoder expansions, 5 workstation expansions, 8 failover recording channels, 8 dual-recording channels, 5 keyboard expansions, 1 DVR, 1 intrusion panel, 1 live and playback site, and ATM/POS, allegiant and OPC functionality.
Order number **MBV-BPLU | F.01U.393.650**

**MBV-XCHANPLU License Camera/decoder expansion**
Expansion license for 1 encoder/decoder channel. Order the exact number required.
Order number **MBV-XCHANPLU | F.01U.393.681**

**MBV-XWSTPLU License Workstation expansion**
Expansion license for 1 workstation (each extra workstation requires 1 license).
Order number **MBV-XWSTPLU | F.01U.393.682**

**MBV-FMAPPLU License online map functionality**
Expansion license for online map functionality.
Order number **MBV-FMAPPLU | F.01U.395.079**

**MBV-FOBJPLU License Map-based tracking assistant**
Expansion license for Map-based tracking assistant.
Order number **MBV-FOBJPLU | F.01U.393.652**

**MBV-XDURPLU License Camera dual recording expansion**
Expansion license for 1 encoder channel used for dual recording.
Order number **MBV-XDURPLU | F.01U.393.687**

**MBV-XDVRPLU License DVR expansion**
Expansion license for 1 DVR. Order the exact number required.
Order number **MBV-XDVRPLU | F.01U.393.683**

**MBV-XFOVPLU License VRM Failover channel expansion**
Expansion license for 1 encoder channel used with a Failover VRM.
Order number **MBV-XFOVPLU | F.01U.393.686**

**MBV-XINTPLU License Intrusion panel expansion**
Expansion license to integrate intrusion panels.
Order number **MBV-XINTPLU | F.01U.393.689**

**MBV-XKBDPLU License Keyboard expansion**
Expansion license for 1 CCTV keyboard. Order the exact number required.
Order number **MBV-XKBDPLU | F.01U.393.684**

**MBV-XLPRPLU License LPR camera expansion**
Expansion license for 1 (Tattile) LPR camera. Order the exact number required.
Order number **MBV-XLPRPLU | F.01U.393.691**

**MBV-XMVSPLU License Mobile video service expansion**
Expansion license for 1 Mobile Video Service.
Order number **MBV-XMVSPLU | F.01U.393.685**

**MBV-XSITEPLU License Unmanaged site expansion**
Expansion license for 1 site. Order the exact number required.
Order number **MBV-XSITEPLU | F.01U.393.688**

**MBV-XSUBPLU License Subsystem expansion**
Expansion license for 1 subsystem. Order the exact number required.
Order number **MBV-XSUBPLU | F.01U.393.692**

**MBV-FPRIPLU License Privacy overlay**
Expansion license for Privacy overlay.
Order number **MBV-FPRIPLU | F.01U.414.239**

**Software Options**

**MBV-MPLU SMA license for MBV-BPLU, 1 year**
1 year of maintenance cover for the Plus Edition base license.
Order number **MBV-MPLU | F.01U.330.513**
MBV-MCHANPLU SMA license for MBV-XCHANPLU, 1 year
1 year of maintenance cover for the Plus Edition camera/decoder expansion license.
Order number MBV-MCHANPLU | F.01U.330.514

MBV-MWSTPLU SMA license for MBV-XWSTPLU, 1 year
1 year of maintenance cover for the Plus Edition workstation expansion license.
Order number MBV-MWSTPLU | F.01U.330.515

MBV-MOBJPLU SMA license for MBV-FOBJPLU, 1 year
One year of maintenance cover for the Map-based tracking assistant license.
Order number MBV-MOBJPLU | F.01U.393.694

MBV-MMAPPLU SMA license for MBV-FMAPPLU, 1 year
One year of maintenance cover for an online map functionality license.
Order number MBV-MMAPPLU | F.01U.395.082

MBV-MPLU-DIP SMA license for MBV-BPLU-DIP, 1 year
One year of maintenance cover for the BVMS license for DIVAR IP all-in-one 6000 and DIVAR IP all-in-one 7000.
Order number MBV-MPLU-DIP | F.01U.389.513

MBV-MMVSPLU SMA license for MBV-XMVSPLU, 1 year
1 year of maintenance cover for the Plus Edition Mobile Video Service expansion license.
Order number MBV-MMVSPLU | F.01U.330.519

MBV-MINTPLU SMA license for MBV-XINTPLU, 1 year
One year of maintenance cover for the BVMS Plus Intrusion panel expansion license.
Order number MBV-MINTPLU | F.01U.330.522

MBV-MSITEPLU SMA license for MBV-XSITEPLU, 1 year
One year of maintenance cover for the site expansion license.
Order number MBV-MSITEPLU | F.01U.381.964

MBV-MSUBPLU SMA license for MBV-XSUBPLU, 1 year
One year of maintenance cover for an Enterprise Subsystem expansion license.
Order number MBV-MSUBPLU | F.01U.389.490

MBV-MLPRPLU SMA license for MBV-XLPRPLU, 1 year
1 year of maintenance cover for the (Tattile) LPR camera expansion license.
Order number MBV-MLPRPLU | F.01U.389.491

MBV-MPRIPLU SMA license for MBV-FPRIPLU, 1 year
One year of maintenance cover for a Privacy overlay license.
Order number MBV-MPRIPLU | F.01U.414.322