

# BVMS Professional 9.0

[www.boschsecurity.com](http://www.boschsecurity.com)



**BOSCH**

Invented for life



- ▶ Embedded resilience - keep operations up and running even when multiple system components fail.
- ▶ Reduced total costs of ownership - manage up to 2000 cameras with a single server to reduce installation and operating costs.
- ▶ Bosch video at its best - the best user-experience combining Bosch cameras with BVMS.
- ▶ Integration - integrate third-party cameras, storage and further systems into BVMS.
- ▶ IT environments and data security - benefit from full IT compatibility from installation to day-to-day management in a secure way.

BVMS Professional 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 system is equipped with a unique embedded resilience. It keeps operations up and running even when both the management server and recording server(s) fail.

Edge Video Content Analysis and the unmatched recording technology, managing up to 2000 cameras with a single recording server, dramatically reduces the total costs of ownership.

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

## Certifications and approvals

### 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, which is further explained in the BVMS - GDPR document, which can be found on the following web page: Bosch Building Technologies Community.

## Installation/configuration notes

The BVMS system design guide is published on the following web page: Bosch Building Technologies Community.

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.

### BVMS Enterprise

Multiple BVMS Plus or BVMS Professional systems can be combined into one BVMS Enterprise System.

Cameras within system context	200.000
Cameras per operator	10.000
Sub-systems	10 (1000 cameras per system)
Sub-systems	50 (200 cameras per system)

### Software assurance

In addition to the Bosch Security Systems standard terms and conditions of sale, the Bosch Software Assurance is a great option to keep BVMS always up to date. With continuously changing platforms and version compatibility, regular updates are essential. With the Bosch Software Assurance, you can relax knowing you are always entitled to the latest software enhancements. It ensures full technical support and access to hotfixes. The Bosch Software Assurance is available in the product catalog.

### 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 web page: Bosch Building Technologies Community.

### System limits



#### Notice

The system limits are based on the hardware recommendations.

Maximum number of workstations	100
Maximum number of cameras	2000
Maximum number of live and playback sites	9999
Maximum number of stitching channels	100
Maximum number of intrusion panels	20
Maximum number of DVR	50
Maximum number of VRM	128
Maximum number of sustained events (logbook) / sec	1000

Maximum number of sustained events (without logbook) / sec	2500
Maximum peak event load / sec (within 60 minutes)	5000
Maximum number of events / sec from ONVIF cameras	500
Logbook size	4GB



#### Notice

The logbook size can be increased by moving the logbook to a separate database server.

### Languages

Component	Languages
Quick installation guide	English, French, German, Simplified Chinese and Spanish
Configuration manual	English, German, Dutch, Italian, Portuguese, French, Spanish, Simplified Chinese, Traditional Chinese, Russian, Czech, Greek, Polish, Swedish, Turkish and Korean.
Operation manual	English, German, Dutch, Italian, Portuguese, French, Spanish, Simplified Chinese, Traditional Chinese, Russian, Czech, Greek, Polish, Swedish, Turkish and Korean.
Software	English, German, Dutch, Italian, Portuguese, French, Spanish, Simplified Chinese, Traditional Chinese, Russian, Hungarian, Japanese, Czech, Danish, Finnish, Greek, Norwegian, Polish, Swedish, Thai, Turkish, Korean, Arabic, and Vietnamese

### Hardware recommendations

#### Cameras

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

How-to: BVMS - Device compatibility.

The list of supported ONVIF cameras can be found on: <http://ipp.boschsecurity.com/bvms>.

If a camera is not listed, testing can be ordered by filling in the custom camera integration form.

**Management Server and Mobile Video Service**

Item	Description
Operating System	Windows Server 2012 R2 (64-bit) Windows Server 2016 (64-bit) Windows 10 Professional (64-bit) Spring Creators update (1803) Windows 10 Professional (64-bit) Fall Creators update (1709) Windows 10 Enterprise (64-bit) LTSB 2016 (1607)
CPU	Intel Xeon E5-2620v3 (2.4 GHz, 6-core, 15MB, 85W)
RAM	8GB
Free disk space	15GB (+ 15% of the hard-drive after installation)
Network	1 Gigabit/s network interface card

**Video Recording Manager**

Item	Description
Operating System	Windows (Storage) Server 2012 R2 (64-bit) Windows (Storage) Server 2016 (64-bit) Windows 10 Professional (64-bit) Spring Creators update (1803) Windows 10 Professional (64-bit) Fall Creators update (1709) Windows 10 Enterprise (64-bit) LTSB 2016 (1607)
CPU	Intel Xeon E5-2620v3 (2.4 GHz, 6-core, 15MB, 85W)
RAM	8GB
Free disk space	15GB (+ 15% of the hard-drive after installation)
Network	1 Gigabit/s network interface card

**Operator Client**

Item	Description
Operating System	Windows 10 Professional (64-bit) Spring Creators update (1803) Windows 10 Professional (64-bit) Fall Creators update (1709) Windows 10 Enterprise (64-bit) LTSB 2016 (1607)
CPU	Intel Core i7 4770 3.4 GHz (up to 3.9 GHz)

Item	Description
RAM	8GB
Free disk space	Minimum 5GB for Single Site Systems Minimum 10GB for Enterprise Systems
Network	1 Gigabit/s network interface card
Display resolution	Minimum: 1280 x 1024 Maximum: 1920 x 1080
Graphic card	Nvidia Quadro K620 Nvidia Quadro M2000 Nvidia Quadro M4000 Nvidia Quadro P2000 Nvidia Quadro P4000 Intel HD Graphics 530

**Network**

To achieve the performance listed in the table below, a 1 Gigabit/s network is a minimum requirement between the Operator Client and Management Server.

**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.

<b>(Unicast)</b> Maximum number of workstations simultaneously viewing the same camera	5
<b>(Multicast)</b> Maximum number of workstations simultaneously viewing the same camera	100
Event response time (assuming sufficient network performance considering bandwidth and delay)	< 1 second
Alarm visibility time (assuming sufficient network performance considering bandwidth and delay), including 1 live image pane, 1 instant playback image page, and 1 map image pane.	< 2 seconds

**Storage devices**

The storage quick selection guide, which also includes non-Bosch storage devices, can be found on: <http://ipp.boschsecurity.com/bvms>

Device	Series
Bosch DIVAR IP	2000, 3000, 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
Bosch DVR	700, 4xx, 6xx
Bosch DiBos	Firmware 8.7
Bosch Recording Station (BRS)	Firmware 8.10 / 8.11

#### 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
Foyer card reader	MINITER 485	n/a
Serial input	Werner Electronic DTP3N	n/a
Intrusion panel	Bosch G-series B9512G 3.03.14, Bosch B5812G 3.03.14, Bosch B5512 3.03.14, Bosch B4512 3.03.14, Bosch B3512 3.03.14	Automation Device in the intrusion panels must be configured as Mode 2
Intrusion panel	Bosch D9412GV4 2.03.018, Bosch D7412GV4 2.03.018	Microsoft Windows Patch 3155464 should not be installed
Monitor wall	Barco Transform N series	RCPPPlus agent 0.9.5.0
Analog matrix switch	Bosch Allegiant Series	Firmware 8.75 or later, Master control software 2.94
ATM/POS Bridge	Bosch ATM/POS Bridge	Version 1.10.00.12
Keyboard	Bosch KBD-Universal XF	USB
Keyboard	Bosch Intuikey	Serial, firmware 1.96

Type	Device	Remarks
Digital I/O	Advantech ADAM-6050, Advantech ADAM-6052, Advantech ADAM-6060, Advantech ADAM-6066	n/a
USB to serial	Belkin serial adapter F5U103VEA	n/a
Ethernet to serial	Comtrol DeviceMaster RTS 4-port	n/a

## Ordering information

### **MBV-BPRO-90 License Professional base**

Base license for Professional Edition. 8 cameras; 2 workstations; 1 CCTV keyboard; 1 DVR. All MBV-X\* and MBV-F\* options are only available with Base license.  
Order number **MBV-BPRO-90**

### **MBV-XCHAN-90 License Camera/decoder expansion**

Expansion license for 1 encoder/decoder channel.  
Order the exact number required.  
Order number **MBV-XCHAN-90**

### **MBV-XWST-90 License Workstation expansion**

Expansion license for 1 workstation (each extra workstation requires 1 license).  
Order number **MBV-XWST-90**

### **MBV-XDVR-90 License DVR expansion**

Expansion license for 1 DVR. Order the exact number required.  
Order number **MBV-XDVR-90**

### **MBV-XKBD-90 License Keyboard expansion**

Expansion license for 1 CCTV keyboard. Order the exact number required.  
Order number **MBV-XKBD-90**

### **MBV-XMVS-90 License Mobile video service expansion**

Expansion license for 1 Mobile Video Service.  
Order number **MBV-XMVS-90**

### **MBV-XFOV-90 License VRM Failover channel expansion**

Expansion license for 1 encoder channel used with a Failover VRM.  
Order number **MBV-XFOV-90**

### **MBV-XDUR-90 License Camera dual recording expansion**

Expansion license for 1 encoder channel used for dual recording.  
Order number **MBV-XDUR-90**

### **MBV-XINT-90 License Intrusion panel expansion**

Expansion license to integrate intrusion panels.  
Order number **MBV-XINT-90**

### **MBV-XSITE-90 License Site expansion**

Expansion license for 1 site. Order the exact number required.  
Order number **MBV-XSITE-90**

### **MBV-FATM-90 License ATM/POS feature**

Expansion license to integrate ATM/POS devices.  
Order number **MBV-FATM-90**

### **MBV-FALG-90 License Allegiant feature**

Expansion license to connect 1 Allegiant Matrix to a Management Server.  
Order number **MBV-FALG-90**

### **MBV-FOPC-90 License OPC feature**

Expansion license to integrate a Building Integration System (BIS).  
Order number **MBV-FOPC-90**

### **MBV-1STCH-90 License Stitching channel expansion**

Expansion license for 1 stitching camera.  
Order number **MBV-1STCH-90**

### **MBV-5AGR-90 License Augmented reality expansion**

Expansion license for 5 static augmented reality tags.  
Order number **MBV-5AGR-90**

### **MBV-FEUP-90 License Professional to Enterprise**

Upgrade license to expand a Professional Edition base license to an Enterprise System base license.  
Order number **MBV-FEUP-90**

### **MBV-XSUB-90 License Enterprise subsystem expansion**

Expansion license for 1 subsystem. Order the exact number required.  
Order number **MBV-XSUB-90**

### **MBV-BENT-90 License Enterprise base**

Base license for Enterprise System. 2 Management Server subsystems (1 required for Enterprise Management); 8 cameras; 2 workstations; 1 CCTV keyboard; 1 DVR. All MBV-X\* and MBV-F\* options are only available with Base license.  
Order number **MBV-BENT-90**

### **MBV-MPRO License for MBV-BPRO-\*, 1yr**

One year of maintenance cover for the Professional Edition base license.  
Order number **MBV-MPRO**

### **MBV-MPRO-3YR License for MBV-BPRO-\*, 3yr**

Three years of maintenance cover for the Professional Edition base license.  
Order number **MBV-MPRO-3YR**

### **MBV-MCHAN License for MBV-XCHAN-\*, 1yr**

One year of maintenance cover for the channel expansion license.  
Order number **MBV-MCHAN**

### **MBV-MCHAN-3YR License for MBV-XCHAN-\*, 3yr**

Three years of maintenance cover for the channel expansion license.  
Order number **MBV-MCHAN-3YR**

### **MBV-MWST License for MBV-XWST-\*, 1yr**

One year of maintenance cover for the Workstation expansion license.  
Order number **MBV-MWST**

### **MBV-MWST-3YR License for MBV-XWST-\*, 3yr**

Three years of maintenance cover for the Workstation expansion license.  
Order number **MBV-MWST-3YR**

### **MBV-MDVR License for MBV-XDVR-\*, 1yr**

One year of maintenance cover for the DVR expansion license.  
Order number **MBV-MDVR**

**MBV-MDVR-3YR License for MBV-XDVR-\*, 3yr**

Three years of maintenance cover for the DVR expansion license.

Order number **MBV-MDVR-3YR**

**MBV-MKBD License for MBV-XKBD-\*, 1yr**

One year of maintenance cover for the CCTV keyboard expansion license.

Order number **MBV-MKBD**

**MBV-MKBD-3YR License for MBV-XKBD-\*, 3yr**

Three years of maintenance cover for the CCTV keyboard expansion license.

Order number **MBV-MKBD-3YR**

**MBV-MMVS License for MBV-XMVS-\*, 1yr**

One year of maintenance cover for the Mobile Video Service expansion license.

Order number **MBV-MMVS**

**MBV-MMVS-3YR License for MBV-XMVS-\*, 3yr**

Three years of maintenance cover for the Mobile Video Service expansion license.

Order number **MBV-MMVS-3YR**

**MBV-MFOV License for MBV-XFOV-\*, 1yr**

One year of maintenance cover for a Failover VRM expansion license.

Order number **MBV-MFOV**

**MBV-MFOV-3YR License for MBV-XFOV-\*, 3yr**

Three years of maintenance cover for a Failover VRM expansion license.

Order number **MBV-MFOV-3YR**

**MBV-MDUR License for MBV-XDUR-\*, 1yr**

One year of maintenance cover for a Dual Recording VRM expansion license.

Order number **MBV-MDUR**

**MBV-MDUR-3YR License for MBV-XDUR-\*, 3yr**

Three years of maintenance cover for a Dual Recording VRM expansion license.

Order number **MBV-MDUR-3YR**

**MBV-MINT License for MBV-XINT-\*, 1yr**

One year of maintenance cover for an intrusion panel expansion license.

Order number **MBV-MINT**

**MBV-MINT-3YR License for MBV-XINT-\*, 3yr**

Three years of maintenance cover for an intrusion panel expansion license.

Order number **MBV-MINT-3YR**

**MBV-MATM-3YR License for MBV-FATM-\*, 3yr**

Three years of maintenance cover for an ATM/POS expansion license.

Order number **MBV-MATM-3YR**

**MBV-MATM License for MBV-FATM-\*, 1yr**

One year of maintenance cover for an ATM/POS expansion license.

Order number **MBV-MATM**

**MBV-MATM-3YR License for MBV-FATM-\*, 3yr**

Three years of maintenance cover for an ATM/POS expansion license.

Order number **MBV-MATM-3YR**

**MBV-MALG License for MBV-XALG-\*, 1yr**

One year of maintenance cover for an Allegiant Matrix expansion license.

Order number **MBV-MALG**

**MBV-MALG-3YR License for MBV-FALG-\*, 3yr**

Three years of maintenance cover for an Allegiant Matrix expansion license.

Order number **MBV-MALG-3YR**

**MBV-MOPC License for MBV-FOPC-\*, 1yr**

One year of maintenance cover for the OPC Server Connection expansion license.

Order number **MBV-MOPC**

**MBV-MOPC-3YR License for MBV-FOPC-\*, 3yr**

Three years of maintenance cover for the OPC Server Connection expansion license.

Order number **MBV-MOPC-3YR**

**MBV-MENT License for MBV-BENT-\*, 1yr**

One year of maintenance cover for the Enterprise Edition base license.

Order number **MBV-MENT**

**MBV-MENT-3YR License for MBV-BENT-\*, 3yr**

Three years of maintenance cover for the Enterprise Edition base license.

Order number **MBV-MENT-3YR**

**MBV-MSUB License for MBV-XSUB-\*, 1yr**

One year of maintenance cover for an Enterprise Subsystem expansion license.

Order number **MBV-MSUB**

**MBV-MSUB-3YR License for MBV-XSUB-\*, 3yr**

Three years of maintenance cover for a Subsystem expansion license.

Order number **MBV-MSUB-3YR**

**MBV-MEUP License for MBV-FEUP-\*, 1yr**

One year of maintenance cover for the upgrade license from Pro to Enterprise.

Order number **MBV-MEUP**

**MBV-MEUP-3YR License for MBV-FEUP-\*, 3yr**

Three years of maintenance cover for the upgrade license from Pro to Enterprise.

Order number **MBV-MEUP-3YR**

**MBV-MSITE License for MBV-XSITE-\*, 1yr**

One year of maintenance cover for the site expansion license.

Order number **MBV-MSITE**

**MBV-MSITE-3YR License for MBV-XSITE-\*, 3yr**

Three years of maintenance cover for the site expansion license.

Order number **MBV-MSITE-3YR**

**Represented by:**

**Europe, Middle East, Africa:**  
Bosch Security Systems B.V.  
P.O. Box 80002  
5600 JB Eindhoven, The Netherlands  
Phone: + 31 40 2577 284  
emea.securitysystems@bosch.com  
emea.boschsecurity.com

**Germany:**  
Bosch Sicherheitssysteme GmbH  
Robert-Bosch-Ring 5  
85630 Grasbrunn  
Germany  
www.boschsecurity.com

**North America:**  
Bosch Security Systems, Inc.  
130 Perinton Parkway  
Fairport, New York, 14450, USA  
Phone: +1 800 289 0096  
Fax: +1 585 223 9180  
onlinehelp@us.bosch.com  
www.boschsecurity.us

**Asia-Pacific:**  
Robert Bosch (SEA) Pte Ltd, Security Systems  
11 Bishan Street 21  
Singapore 573943  
Phone: +65 6571 2808  
Fax: +65 6571 2699  
apr.securitysystems@bosch.com  
www.boschsecurity.asia