

# **BVMS Plus 10.1**



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.

# **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.



- Flexible deployment choose between costeffective appliances or a software-only deployment.
- Embedded resilience keep operations up and running even when multiple system components fail.
- Bosch video at its best the best userexperience 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-today management in a secure way.

## Installation/configuration notes

The BVMS system design guide is published on the following website:

Bosch Building Technologies Knowledge Base.

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

#### **BVMS Enterprise**

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

Cameras within system context	200000
Cameras per operator	10000

# Sub-systems

Between 10 sub-systems with 1000 cameras per system or 100 subsystems with 100 cameras per system.

# 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 web page:

# Bosch Building Technologies Knowledge Base

# System limits

# (i) Notice

The system limits are based on the hardware recommendations.

Maximum number of workstations	10
Maximum number of cameras	256
Maximum number of live and playback sites	10
Maximum number of intrusion panels	10
Maximum number of DVRs	10
Maximum number of VRMs	2
Maximum number of sustained events (logbook) / sec	500
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

# (i) Notice

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

### 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 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.

Item	Description
Operating System	Windows Server 2012 R2 (64-bit)
	Windows Server 2016 (64-bit)

Item	Description
	Windows 10 Professional (64-bit) build 1909
	Windows 10 Professional (64-bit) build 2004
	Windows 10 Enterprise (64-bit) 2019 LTSC build 1809
	Windows Server 2019 (64-bit)
CPU	Intel Xeon E3-1275 V3 (3.5 GHz,4- core)
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) build 1909
	Windows 10 Professional (64-bit) build 2004
	Windows 10 Enterprise (64-bit) 2019 LTSC build 1809
CPU	Intel Xeon W-2123 (3.6 GHz)
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: 3840 x 2160
Graphic card	Nvidia Quadro P620
	Nvidia Quadro P2000
	Nvidia Quadro P4000
	Nvidia Quadro RTX4000
	Nvidia Quadro P2200
	Intel HD Graphics 630

# 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.

(Unicast) Maximum number of 5 workstations simultaneously viewing the same camera

(Multicast) 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

# (i) 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.

# (i) 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

Device	Series
Bosch DIVAR IP	2000, 3000, 5000, 6000, 7000
Bosch DIVAR IP AiO	5000, 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

Туре	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

Туре	Device	Remarks
Intrusion panel	Bosch G-series B9512G 3.03.14,	Automation Device in the intrusion panels
	Bosch B5812G 3.03.14,	must be configured as Mode 2
	Bosch B5512 3.03.14,	
	Bosch B4512 3.03.14,	
	Bosch B3512 3.03.14,	
	Bosch B6512 3.03.14	
Intrusion panel	Bosch D9412GV4 2.03.018,	Microsoft Windows Patch 3155464 should
	Bosch D7412GV4 2.03.018	not be installed
Monitor wall	Barco Transform N series	RCPPlus 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
Digital I/O	Advantech ADAM-6050,	n/a
	Advantech ADAM-6052,	
	Advantech ADAM-6060,	
	Advantech ADAM-6066	
USB to serial	Belkin serial adapter F5U103VEA	n/a
Ethernet to serial	Comtrol DeviceMaster RTS 4-port	n/a
LPR camera	Tattile Vega Basic	n/a
	Tattile Vega Smart	
	Tattile Vega1	

# **Ordering information**

# MBV-BPLU-101 License Plus base

Includes 8 camera/decoder expansions, 5 workstation expansions, 8 failover recording channels, 8 dualrecording 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-101 | F.01U.389.477

MBV-XCHANPLU-101 License Camera/decoder
expansion
Expansion license for 1 encoder/decoder channel. Order
the exact number required.
Order number MBV-XCHANPLU-101   F.01U.389.479
MBV-XDURPLU-101 License Camera dual recording
expansion
Expansion license for 1 camera dual recording channel.
Order the exact number required.
Order number MBV-XDURPLU-101   F.01U.389.480
MBV-XDVRPLU-101 License DVR expansion
Expansion license for 1 DVR. Order the exact number
required.
Order number MBV-XDVRPLU-101   F.01U.389.478
MBV-XFOVPLU-101 License VRM Failover channel
expansion
Expansion license for 1 VRM failover channel. Order the
exact number required.
Order number <b>MBV-XFOVPLU-101   F.01U.389.481</b>
MBV-XINTPLU-101 License Intrusion panel expansion
Expansion license for 1 Intrusion panel. Order the exact
number required.
Order number MBV-XINTPLU-101   F.01U.389.482
MBV-XKBDPLU-101 License Keyboard expansion
Expansion license for 1 video surveillance keyboard.
Order the exact number required.
Order number MBV-XKBDPLU-101   F.01U.389.483
MBV-XLPRPLU-101 License LPR camera expansion
Expansion license for 1 (Tattile) LPR camera. Order the
exact number required.
Order number MBV-XLPRPLU-101   F.01U.389.488
MBV-XMVSPLU-101 License Mobile video service
expansion
Expansion license for 1 mobile video service. Order the
exact number required.
Order number MBV-XMVSPLU-101   F.01U.389.489
MBV-XPIPLU-101 License Person ident. channel
expansion
Expansion license for 1 Person Identification channel.
Order the exact number required.
Order number <b>MBV-XPIPLU-101   F.01U.389.485</b>
MBV-XSITEPLU-101 License Site expansion
<b>MBV-XSITEPLU-101 License Site expansion</b> Expansion license for 1 site. Order the exact number
<b>MBV-XSITEPLU-101 License Site expansion</b> Expansion license for 1 site. Order the exact number required.
<b>MBV-XSITEPLU-101 License Site expansion</b> Expansion license for 1 site. Order the exact number required. Order number <b>MBV-XSITEPLU-101   F.01U.389.486</b>
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Order number MBV-XWSTPLU-101 | F.01U.389.484

# **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-MDVRPLU SMA license for MBV-XDVRPLU, 1 year

1 year of maintenance cover for the Plus Edition DVR expansion license.

Order number MBV-MDVRPLU | F.01U.330.517

#### MBV-MKBDPLU SMA license for MBV-XKBDPLU, 1 year

1 year of maintenance cover for the Plus Edition keyboard expansion license.

Order number MBV-MKBDPLU | F.01U.330.518

# **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-MFOVPLU SMA license for MBV-XFOVPLU, 1 year** 1 year of maintenance cover for the Plus Edition Failover VRM expansion license.

Order number MBV-MFOVPLU | F.01U.330.520

# **MBV-MDURPLU SMA license for MBV-XDURPLU, 1 year** 1 year of maintenance cover for the Plus Edition Dual Recording VRM expansion license.

Order number MBV-MDURPLU | F.01U.330.521

# 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-MAGRPLU License for MBV-1AGRPLU-\*, 1yr

One year of maintenance cover for an augmented reality expansion license.

Order number MBV-MAGRPLU | F.01U.359.361

# **MBV-MSTCHPLU License for MBV-1STCHPLU-\*, 1yr** One year of maintenance cover for the BVMS Stitching channel expansion license.

Order number MBV-MSTCHPLU | F.01U.359.359

**MBV-MPIPLU SMA license for MBV-XPIPLU, 1 year** One year of maintenance cover for a BVMS Plus person identification channel expansion license.

### Order number MBV-MPIPLU | F.01U.362.210

#### Represented by:

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

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

Order number MBV-MENT | F.01U.273.759

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

One year of maintenance cover for an Enterprise Subsystem expansion license. Order number **MBV-MSUB | F.01U.273.760**