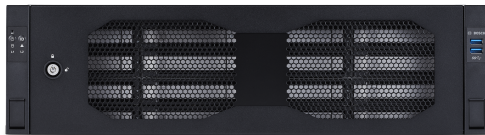


## DIVAR IP all-in-one 7000 3U (gen 4)



- ▶ RAID-5 protected (standard configuration), all-in-one, fully featured BVMS-based video recording and management solution for up to 256 channels
- ▶ Out-of-the-box IP video recording with up to 288 TB (16 x 18 TB) storage capacity pre-installed
- ▶ Robust, secure operation – instant real time access to video
- ▶ BVMS-based advanced user and alarm management
- ▶ DIVAR IP System Manager for operation mode selection, software setup and upgrades

DIVAR IP all-in-one 7000 is an affordable and easy to use all-in-one recording, viewing, and management solution for network surveillance systems of up to 256 channels (with 8 channels pre-licensed). DIVAR IP all-in-one 7000 is a 3U rack mount unit that combines advanced Bosch Video Management System capabilities and state-of-the-art recording management into a single cost-effective, convenient to install and operate recording device for IT-minded customers.

### System overview

DIVAR IP all-in-one 7000 devices utilize a highly energy efficient embedded design. Easy to install and operate, DIVAR IP all-in-one 7000 systems feature wizard-based set-up and centralized configuration.

### Operation modes

DIVAR IP all-in-one 7000 systems can operate in three different modes:

- Full video recording and management system, utilizing the BVMS and Video Recording Manager core components and services. This mode provides an advanced IP video security solution that delivers seamless management of digital video, audio and data across an IP network.

It seamlessly combines IP cameras and encoders, provides system-wide event and alarm management, system health monitoring, user and priority management. This mode provides the best video management system to go with Bosch video surveillance devices, leveraging the unique capabilities of Bosch cameras and recording solutions. It includes Video Streaming Gateway components to integrate third-party cameras.

- Advanced video recording solution for a BVMS system, utilizing the Video Recording Manager core components and services, leveraging the unique capabilities of Bosch cameras and recording solutions. Up to two Video Recording Manager servers can be added to a BVMS system running on a DIVAR IP all-in-one device.
- iSCSI storage expansion for a BVMS system, which runs on a different hardware. Up to four of these iSCSI storage expansions can be added to a BVMS system running on a DIVAR IP all-in-one 7000 device.

### Functions

DIVAR IP all-in-one 7000 utilizes embedded design and core components, and is based on the operating system Microsoft Windows Server IoT 2022 for

Storage Standard. DIVAR IP all-in-one 7000 features “enterprise-rated” hot-swappable SATA hard drives, providing up to 288 TB of gross storage capacity.

### Ease of installation

Once started, the system will offer installation of the DIVAR IP System Manager application, which will guide you through the operation mode selection. Latest software packages can be installed in one step.

The system features wizard-based BVMS set-up and configuration to begin recording after just a few simple steps.

### Management and health monitoring

DIVAR IP System Manager provides a central user interface for operation mode selection and for software setup and upgrade, which reduces installation and training requirements and keeps ongoing system management costs low. When DIVAR IP all-in-one is connected to the Bosch Remote Portal, Remote System Management service allows to leverage the power of the Internet of Things (IoT) to provide an easy-to-use set of tools and capabilities for secure, transparent and cost-effective asset management throughout the life cycle of a device or system. This service enables users to perform inventory and update management, as well as health monitoring tasks for an entire system from one centralized Remote Portal platform. The DIVAR IP all-in-one 7000 devices provide SNMP monitoring support for the system’s hardware and for the video management applications to ensure maximum uptime. BMC controller operating via dedicated Ethernet LAN port allows the user to access, monitor, diagnose, and manage DIVAR IP all-in-one 7000 as a remote server.

### Instant real time access to video

View high quality HD or UHD video despite low or limited bandwidth connections. Dynamic Transcoding technology ensures you can view your video immediately – anytime, anywhere. Dynamic Transcoding decodes and re-encodes the data stream to a lower rate bit stream tailored to the bandwidth of the connection. When the video is paused, the instant detail enhancement feature instantly displays the full resolution video. DIVAR IP all-in-one 7000 supports transcoding of up to four 4K UHD 30fps streams.

### Remote viewing

For remote viewing of a single DIVAR IP all-in-one system, BVMS Operator Client is included. For multiple systems, add them to BVMS Enterprise Management Server. Alternatively, use Video Security App for remote viewing from mobile devices.

## Regulatory information

Certifications/Directives	CB, UL, CE, UKCA, FCC, VCCI, RCM, KC, BSMI, SABS, RoHS, WEEE, China RoHS, BIS, NDA, TAA
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## Region Regulatory compliance/quality marks

Europe	CE
Great Britain	UKCA
Morocco	CMIM

## Installation/configuration notes



### Notice

#### Environmental conditions

Install the system in a clean, dust-free, dry and weather-protected area that is well ventilated. Avoid areas where heat, electrical noise and electromagnetic fields are generated. The standard warranty coming with the system will be void if evidence is seen that the system was exposed to conditions contradicting the environmental conditions mentioned here.

### Configuration of new hard drives

DIVAR IP all-in-one units that come pre-equipped with hard drives from factory are ready to record out-of-the-box. Hard drives that have been added to an empty unit need to be configured before using them for video recording. The RAID configuration of new hard drives must be set up manually via the pre-installed RAID management utility. Only after this manual RAID configuration the DIVAR IP all-in-one 7000 system provides full functionality.

### RAID configuration

The DIVAR IP all-in-one 7000 units come pre-configured in a RAID-5 standard configuration with iSCSI LUNs (pre-populated system only) and provide the following specifications:

### RAID-5 configuration

Total pre-installed gross storage capacity	Net capacity	Maximum recording bandwidth*	Maximum IP camera channels
w/o HDD	n/a	550 Mbit/s	256
16 x 18 TB	251370 GB	550 Mbit/s	256

\*Performance only warranted with hard drive models tested and qualified by Bosch.

These values refer to the BVMS / VRM recording engine, net capacity for a RAID-5 configuration without hot spare, 256 licensed IP camera channels providing up to 256 recording iSCSI sessions, and four replay clients. These specifications refer to any of the three operating modes.

Optional supported RAID configurations are RAID-5 with 1 x hot spare or RAID-6 without hot spare. The optional RAID configurations will not come pre-configured but must be set up manually via the pre-installed RAID configuration utility.

### RAID-5 plus hot spare configuration/RAID-6 configuration

Total pre-installed gross storage capacity	Net capacity	Maximum recording bandwidth*	Maximum IP camera channels
w/o HDD	n/a	550 Mbit/s	256
16 x 18 TB	234612 GB	550 Mbit/s	256

\*Performance only warranted with hard drive models tested and qualified by Bosch.

#### **i** Notice

The recorded video streams need to be configured in a way that the maximum bandwidth of the system (BVMS/VRM base system plus iSCSI storage expansions) is not exceeded.

### Licensing

For the BVMS licenses applied on DIVAR IP all-in-one 7000, note pre-licensed quantities, quantities that come with the base license, and the upper limit of each:

License type	Pre-licensed	Base license MBV-BPLU-DIP	Upper limit
IP channel	8	32	256
Workstation client	2	5	20
DVR	1	1	10
CCTV Keyboard	2	5	10
Mobile Video Service	1*	1*	4*
Subsystems	0	0	20
Intrusion Panel	1	1	10
Failover VRM channel	0	8	256
Dual recording channel	0	8	256
Unmanaged Site	0	1	20
LPR channel	0	0	10
Online map functionality	0	0	1

License type	Pre-licensed	Base license MBV-BPLU-DIP	Upper limit
Map-based tracking assistant	0	0	1
Privacy overlay	0	0	1

\*Mobile Video Service needs to run on separate hardware.

**i** **Notice**  
**Uninterruptible power supply (UPS)**  
 Bosch recommends to use an online uninterruptible power supply (UPS).

#### **i** Notice

Bosch is not liable for any data loss, damages, or system failures of units equipped with hard drives that are not supplied by Bosch. Bosch cannot provide support if non-Bosch-supplied hard drives are considered to be the cause of the problem. To troubleshoot potential hardware issues, Bosch will require Bosch-supplied hard drives to be installed.

#### **i** Notice

The system requires mouse and keyboard for setup and operation. These components are not included.

#### **i** Notice

##### **Hardware warranty**

DIVAR IP all-in-one devices come with a 5-year service level agreement that covers next business day on-site parts replacement service. This service level can only be provided if the respective device has been registered immediately after receipt and installation. Otherwise, service will be provided based on best effort basis. Information about registration details is available in every shipment or in the Bosch online product catalog. This service level cannot be provided in every country everywhere.

#### **i** Notice

##### **Software maintenance**

Maintenance of software components is not included in this product. A separate maintenance agreement needs to be purchased, in order to receive updates and technical support for the installed software. You can find more details about the Bosch Software Assurance under: <https://www.boschsecurity.com/xc/en/solutions/management-software/bosch-software-assurance/>

## Technical specifications

### Electrical

Type of power supply	VAC
Operating voltage (VAC)	100 - 240 VAC
Maximum output power (W)	800 W
Power frequency	50 Hz; 60 Hz
Power supply	Redundant, hot-swappable
Power supply efficiency rating	80 PLUS Titanium

### 120 VAC input (under highest capacity)

Rated input current (A)	2.8 A
Actual output wattage from power supply (W)	317 W
Efficiency of power supply (%)	93%
Power consumption* (W)	Maximum 341 W
Maximum heat loss (BTU/h)	1162 BTU/h
Power factor	0.99
System AC input VA requirement	344 VA

\*System power consumption may vary based on workload and environment.

### 240 VAC input (under highest capacity)

Rated input current (A)	1.4 A
Actual output wattage from power supply (W)	317 W
Efficiency of power supply (%)	95%
Power consumption* (W)	Maximum 333 W
Maximum heat loss (BTU/h)	1137 BTU/h
Power factor	0.98
System AC input VA requirement	339 VA

\*System power consumption may vary based on workload and environment.

### Mechanical

Dimension (H x W x D mm)	132.5 x 448 x 660 mm
Dimension (H x W x D in)	5.1 x 17.6 x 25.5 in
Mounting type	Rack-mounted

Rack unit	3U
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	<b>DIP-74G0-00N Management appliance, 3U w/o HDD</b>
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Weight (kg)	19.5 kg
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Weight (lb)	43.0 lb
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	<b>DIP-74GI-16HD Management appliance, 3U 16X18TB</b>
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Weight (kg)	30.4 kg
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Weight (lb)	67.0 lb
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### Environmental

Operating temperature (°C)	0 - 40 °C
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Operating temperature (°F)	32 - 104 °F
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Storage temperature (°C)	-40 - 70 °C
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Storage temperature (°F)	-40 - 158 °F
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Operating relative humidity, non-condensing (%)	8 - 90 %
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Storage relative humidity (%)	5 - 95 %
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### Operation

Processor	Intel® Core™ i7-12700E
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Processor base frequency	2.10 GHz
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Cache	25 MB Intel® Smart Cache
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Installed memory	16 GB DDR5-4800 1Rx16 ECC UDIMM
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Memory protection	ECC unbuffered
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Operating system	Microsoft Windows Server IoT 2022 for Storage Standard
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System drive	2x SATA3 2.5" 480 GB Enterprise SSD, RAID1 configuration
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Processor graphics	Intel® UHD Graphics 770
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SAS RAID Card	12 Gb/s Sixteen-Port
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Software compatibility	Bosch Video Management System, Bosch Video Recording Manager, Video Security App, Video Security Client, Video Streaming Gateway
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Noise level	Less than 75 dBA (100% fan speed)
<b>Storage</b>	
Internal storage	HDD
HDD connectivity	SATA3
HDD dimension	3.5 in
Maximum internal hard drives	16
HDD rotation speed (rpm)	7200 rpm
<b>Connectivity</b>	
Number of USB ports	4 Front: 2 USB 3.2 Gen1 ports Rear: 2 USB 3.2 Gen1 ports
Number of Ethernet ports	2 RJ45 Gigabit Ethernet LAN ports (teamed)
Network port	1 BMC port
Number of video outputs	2 2 x HDMI 2.0, 4K (3840 x 2160) / 60 Hz
Multi-display support	Maximum of 2 displays of up to 4K@60Hz resolution per display (HDMI)
Maximum IP camera channels	256
<b>Data security</b>	
Crypto coprocessor (TPM)	Discrete TPM 2.0 (FIPS 140-2 certified)

### Ordering information

**DIP-74G0-00N Management appliance, 3U w/o HDD**  
All-in-one recording, viewing and management solution for network surveillance systems. Without HDD. NDAA and TAA compliant.  
Order number **DIP-74G0-00N**

**DIP-74GI-16HD Management appliance, 3U 16X18TB**  
All-in-one recording, viewing and management solution for network surveillance systems. With 16 x 18 TB storage capacity. NDAA and TAA compliant.  
Order number **DIP-74GI-16HD**

### Accessories

**DIP-AIO-4HDD-T HDD 4TB for DIVAR IP all-in-one**  
Hard disk storage expansion for DIVAR IP all-in-one appliances with a capacity of 4 TB.  
Order number **DIP-AIO-4HDD-T**

**DIP-AIO-8HDD-T HDD 8TB for DIVAR IP all-in-one**  
Hard disk storage expansion for DIVAR IP all-in-one appliances with a capacity of 8 TB.  
Order number **DIP-AIO-8HDD-T**

**DIP-AIO-18HDD-T HDD 18TB for DIVAR IP all-in-one**  
Hard disk storage expansion for DIVAR IP all-in-one appliances with a capacity of 18 TB.  
Order number **DIP-AIO-18HDD-T**

### Software Options

#### **MBV-BPLU-DIP License Plus base for DIP AIO 6000-7000**

BVMS license for DIVAR IP all-in-one 6000 and DIVAR IP all-in-one 7000.  
Base license for 32 channels (cameras/decoders).  
Order number **MBV-BPLU-DIP**

#### **MBV-XCHANPLU License Camera/decoder expansion**

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

#### **MBV-XWSTPLU License Workstation expansion**

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

#### **MBV-XDVRPLU License DVR expansion**

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

#### **MBV-XKBDPLU License Keyboard expansion**

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

#### **MBV-XMVSPLU License Mobile video service expansion**

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

#### **MBV-XSUBPLU License Subsystem expansion**

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

#### **MBV-XINTPLU License Intrusion panel expansion**

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

#### **MBV-XFOVPLU License VRM Failover channel expansion**

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

#### **MBV-XDURPLU License Camera dual recording expansion**

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

**MBV-XSITEPLU License Unmanaged site expansion**

Expansion license for 1 site. Order the exact number required.

Order number **MBV-XSITEPLU**

**MBV-XLPRPLU License LPR camera expansion**

Expansion license for 1 (Tattile) LPR camera. Order the exact number required.

Order number **MBV-XLPRPLU**

**MBV-FMAPPLU License online map functionality**

Expansion license for online map functionality.

Order number **MBV-FMAPPLU**

**MBV-FOBJPLU License Map-based tracking assistant**

Expansion license for Map-based tracking assistant.

Order number **MBV-FOBJPLU**

**MBV-FPRIPLU License Privacy overlay**

Expansion license for Privacy overlay.

Order number **MBV-FPRIPLU**

**CBS-RM-DIP7 Remote System Management DIP 7000 1yr**

License to enable Remote System Management services for one DIVAR IP all-in-one 7000 (DIP-72xx, DIP-73xx, DIP-74xx) device for a 1 year period

Order number **CBS-RM-DIP7**

**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**

**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**

**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**

**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**

**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**

**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**

**MBV-MSUBPLU SMA license for MBV-XSUBPLU, 1 year**

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

Order number **MBV-MSUBPLU**

**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**

**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**

**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**

**MBV-MSITEPLU SMA license for MBV-XSITEPLU, 1 year**

One year of maintenance cover for the site expansion license.

Order number **MBV-MSITEPLU**

**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**

**MBV-MMAPPLU SMA license for MBV-FMAPPLU, 1 year**

One year of maintenance cover for an online map functionality license.

Order number **MBV-MMAPPLU**

**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**

**MBV-MPRIPLU SMA license for MBV-FPRIPLU, 1 year**

One year of maintenance cover for a Privacy overlay license.

Order number **MBV-MPRIPLU**

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