BOSCH

DIVAR IP all-in-one 7000 2U (gen 4)

VRM   BVMS   iSCSI   RAID5   RAID6

▶ 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 216 TB (12 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 2U 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 216 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, NDAA, TAA

Region	Regulatory compliance/quality marks
Europe	CE
Great Britain	UKCA
Morocco	CMIM

Installation/configuration notes

(i) **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
8 x 4 TB	26068 GB	550 Mbit/s	256
8 x 8 TB	52136 GB	550 Mbit/s	256
8 x 18 TB	117306 GB	550 Mbit/s	256
12 x 18 TB	184338 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 4 replay clients with combined replay bandwidth of 150 Mbps. 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
8 x 4 TB	22344 GB	550 Mbit/s	256
8 x 8 TB	44688 GB	550 Mbit/s	256
8 x 18 TB	100548 GB	550 Mbit/s	256
12 x 18 TB	167580 GB	550 Mbit/s	256

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

ⓘ **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	20
Mobile Video Service	1*	1*	4*
Subsystems	0	0	20

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

*Mobile Video Service needs to run on separate hardware.

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

ⓘ **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.

ⓘ **Notice**

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

ⓘ **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.

ⓘ **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/

ⓘ **Notice**
Defective media retention (DMR) service
DIVAR IP all-in-one 7000 (gen 4) systems offer an optional defective media retention (DMR) service. This allows customers to retain defective drives (HDDs and SSDs), which were originally in the system, and which are replaced under standard product SLA coverage.
Separately purchased HDDs, including those from Bosch, are not covered by the DMR SLA. The DMR service must be ordered together with the respective DIVAR IP all-in-one 7000 (gen 4) system. Ordering at a later stage is not possible.

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)	2.6 A
Actual output wattage from power supply (W)	292 W
Efficiency of power supply (%)	93%
Power consumption* (W)	Maximum 314 W
Maximum heat loss (BTU/h)	1071 BTU/h
Power factor	0.98
System AC input VA requirement	320 VA

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

240 VAC input (under highest capacity)

Rated input current (A)	1.3 A
Actual output wattage from power supply (W)	292 W
Efficiency of power supply (%)	95%
Power consumption* (W)	Maximum 311 W
Maximum heat loss (BTU/h)	1061 BTU/h
Power factor	0.98
System AC input VA requirement	317 VA

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

Mechanical

Dimension (H x W x D mm)	88 x 448 x 660 mm
Dimension (H x W x D in)	3.4 x 17.6 x 25.5 in
Mounting type	Rack-mounted
Rack unit	2U

	DIP-74C0-00N Management appliance, 2U w/o HDD
Weight (kg)	15.50 kg
Weight (lb)	34.20 lb

	DIP-74C4-8HD Management appliance, 2U 8X4TB
Weight (kg)	20.80 kg

	DIP-74C4-8HD Management appliance, 2U 8X4TB
Weight (lb)	45.90 lb

	DIP-74C8-8HD Management appliance, 2U 8X8TB
Weight (kg)	21.10 kg
Weight (lb)	46.50 lb

	DIP-74CI-8HD Management appliance, 2U 8X18TB
Weight (kg)	20.90 kg
Weight (lb)	46.10 lb

	DIP-74CI-12HD Management appliance, 2U 12X18TB
Weight (kg)	23.70 kg
Weight (lb)	52.20 lb

Environmental

Operating temperature (℃)	0 - 40 ℃
Operating temperature (℉)	32 - 104 ℉
Storage temperature (℃)	-40 - 70 ℃
Storage temperature (℉)	-40 - 158 ℉
Operating relative humidity, non-condensing (%)	8 - 90 %
Storage relative humidity (%)	5 - 95 %

Operation

Processor	Intel® Core™ i7-12700E
Processor base frequency	2.10 GHz
Cache	25 MB Intel® Smart Cache
Installed memory	16 GB DDR5-4800 1Rx16 ECC UDIMM
Memory protection	ECC unbuffered
Operating system	Microsoft Windows Server IoT 2022 for Storage Standard
System drive	2x SATA3 2.5' 480 GB Enterprise SSD, RAID1 configuration

Processor graphics	Intel® UHD Graphics 770
SAS RAID Card	12 Gb/s Sixteen-Port
Software compatibility	Bosch Video Management System, Bosch Video Recording Manager, Video Security App, Video Security Client, Video Streaming Gateway
Noise level	Less than 75 dBA (100% fan speed)

Storage

Internal storage	HDD
HDD connectivity	SATA3
HDD dimension	3.5 in
Maximum internal hard drives	12
HDD rotation speed (rpm)	7200 rpm

Connectivity

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

Data security

Crypto coprocessor (TPM)	Discrete TPM 2.0 (FIPS 140-2 certified)

Ordering information

DIP-74C0-00N Management appliance, 2U w/o HDD
All-in-one recording, viewing and management solution for network surveillance systems. Without HDD.
NDAA and TAA compliant.
Order number **DIP-74C0-00N**

DIP-74C4-8HD Management appliance, 2U 8X4TB
All-in-one recording, viewing and management solution for network surveillance systems. With 8 x 4 TB storage capacity.
NDAA and TAA compliant.
Order number **DIP-74C4-8HD**

DIP-74C8-8HD Management appliance, 2U 8X8TB
All-in-one recording, viewing and management solution for network surveillance systems. With 8 x 8 TB storage capacity.
NDAA and TAA compliant.
Order number **DIP-74C8-8HD**

DIP-74CI-8HD Management appliance, 2U 8X18TB
All-in-one recording, viewing and management solution for network surveillance systems. With 8 x 18 TB storage capacity.
NDAA and TAA compliant.
Order number **DIP-74CI-8HD**

DIP-74CI-12HD Management appliance, 2U 12X18TB
All-in-one recording, viewing and management solution for network surveillance systems. With 12 x 18 TB storage capacity.
NDAA and TAA compliant.
Order number **DIP-74CI-12HD**

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**

Services

DIP-74C0S0NDMR-POS DIP-74C0-00N DMR SLA POS
Defective media retention service for pre-installed and replaced SSDs of a DIP-74C0-00N system, for the whole warranty period. Only valid if ordered together with the system.
Order number **DIP-74C0S0NDMR-POS**

DIP-74C4S8HDMR-POS DIP-74C4-8HD DMR SLA POS
Defective media retention service for pre-installed and replaced SSDs/HDDs of a DIP-74C4-8HD system, for the whole warranty period. Only valid if ordered together with the system.
Order number **DIP-74C4S8HDMR-POS**

DIP-74C8S8HDMR-POS DIP-74C8-8HD DMR SLA POS
Defective media retention service for pre-installed and replaced SSDs/HDDs of a DIP-74C8-8HD system, for the whole warranty period. Only valid if ordered together with the system.
Order number **DIP-74C8S8HDMR-POS**

DIP-74CIS8HDMR-POS DIP-74CI-8HD DMR SLA POS
Defective media retention service for pre-installed and replaced SSDs/HDDs of a DIP-74CI-8HD system, for the whole warranty period. Only valid if ordered together with the system.
Order number **DIP-74CIS8HDMR-POS**

DIP-74CISCHDMR-POS DIP-74CI-12HD DMR SLA POS
Defective media retention service for pre-installed and replaced SSDs/HDDs of a DIP-74CI-12HD system, for the whole warranty period. Only valid if ordered together with the system.
Order number **DIP-74CISCHDMR-POS**

https://www.boschsecurity.com