DIVAR IP 7000 2U

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BOSCH
Invented for life

- ▶ RAID-5 protected, all-in-one, fully featured video management solution for up to 128 channels
- ▶ Out-of-the-box IP video management solution with up to 24 TB storage capacity
- ▶ Robust, secure operation — instant real time access to video
- ▶ Instantly find what you are looking for
- ▶ Advanced user and alarm management

DIVAR IP 7000 2U is an affordable, simple and reliable all-in-one recording, viewing and management solution for network surveillance systems of up to 128 channels (with 32 channels pre-licensed).
Running the full Bosch VMS (Video Management System) solution and powered by VRM Video Recording Manager software from Bosch,
DIVAR IP 7000 is an intelligent IP storage device that eliminates the need for separate NVR (Network Video Recorder) server and storage hardware, reducing the total cost of ownership by as much as 45%.
DIVAR IP 7000 2U is a 2HU rack mount unit that combines advanced management and state-of-the-art recording management into a single cost-effective, plug and play IP recording appliance for IT-minded customers which are seeking for a state-of-the-art "second generation" NVR recording solution.

System overview

DIVAR IP 7000 2U utilizes an energy efficient, embedded design which reduces possible points of failure and boasts Bosch quality through-and-through. Utilizing "enterprise-rated" hard drives in a fault tolerant RAID-5 configuration, dual port Gigabit Ethernet network interface, 4 GB system memory and an Intel Xeon Quad Core Processor, the device delivers high-end performance at a very affordable price.

Easy to install and operate, the system features wizard-based set-up and centralized configuration to reduce installation times by as much as 45%. All components are pre-installed and pre-licensed. Simply connect to the network and power the unit up — DIVAR IP is ready to begin recording straight out of the box.
Bosch Video Management System manages all IP and digital video and audio, plus all the security data being transmitted across your IP network. It seamlessly combines IP cameras and encoders, provides system-wide event and alarm management, system health monitoring, user and priority management.

Functions

DIVAR IP 7000 2U features highly energy-efficient hot-swap redundant power supplies, as well as front-swappable SATA-II hard drives providing up to 24 TB of gross storage capacity. All system software is pre-installed and pre-activated — creating an out-of-the-box ready-to-use video management appliance. It utilizes Microsoft Windows Server 2008 R2.

Instant real time access to video
View high quality HD video despite low or limited bandwidth connections. Dynamic Transcoding technology ensures you can view your video immediately — anytime, anywhere.

Dynamic Transcoding retrieves the data from the DIVAR IP system and subsequently decodes and decompresses 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 HD video.

Management
Once booted up the system will offer immediate access to the Bosch VMS management application via a customized GUI. The ability to use one central GUI for configuration and operation management reduces installation and training requirements, and helps keep ongoing system management costs low.

Remote viewing
For remote viewing of a single DIVAR IP system, Bosch VMS Operator Client is included. For multiple systems, add them to Bosch VMS Enterprise Management Server.
Alternatively, use Video Client for viewing video or as entry-level video management solution without the need of additional licenses.

IT Management
Microsoft Windows Storage Server 2008 R2 provides a simple, intuitive user interface for system configuration and unified appliance management. Administrators and IT professionals will appreciate the ability to manage DIVAR IP 6000/7000 using the built-in Microsoft System Center Suite. The ability to use one central tool for configuration and operations management reduces installation and training requirements, and helps keep ongoing system management costs low.

Bosch quality
Bosch subjects all its products to the most comprehensive and rigorous battery of quality endurance tests in the industry. Our recording products are subjected to extreme temperatures, voltages and vibrations to determine true operating limits, so you can be assured of long-term reliable operation. And Bosch firmly stands behind every product it sells with an end-to-end 3 year warranty backed by technical support.

Certifications and approvals

Region	Certification	
Europe	CE	DIVAR IP 6000/7000
	CE	DIVAR IP 6000/7000 3TB
USA	UL	DIVAR IP 6000/7000 2U

Installation/configuration notes

DIVAR IP 7000 2U comes pre-configured in a RAID-5 standard configuration with seven LUNs and provides the following specifications:

Gross Capacity	Net Capacity	Bandwidth	BVIP Modules
w/o HDD	n/a	200 Mbit/s	32+
8 x 2 TB	12930 GB	200 Mbit/s	32+
8 x 3 TB	19551 GB	200 Mbit/s	32+

These values refer to the Bosch VMS recording engine; Net capacity for a RAID-5 configuration without hot spare; 32+ connected BVIP modules indicate the number of concurrent recordable cameras plus eight sessions for replay.
Storage may be increased by adding up to four DIVAR IP 6000 units as expansion.
DIVAR IP 7000 2U may be upgraded with 8-channel licenses (MBV-XCHAN-DIP) up to 64 channels using the standard base license (pre-installed).
It can be upgraded to 128 channels by additionally purchasing the extension base license (MBV-BXPAN-DIP) plus the respective 8-channel licenses (MBV-XCHAN-DIP).
For the standard systems please note the number of pre-installed licenses and the upper limit of each:

	Pre-installed lincenses	Upper limit
Workstation clients	5	10
DVR/BRS systems	1	10
CCTV keyboards	1	10
Forensic Search clients	5	10
Mobile video service	1	2

For further information, under **Ordering information** see **Software Options**.

> **i** **Notice**
> Bosch is not liable for system failures of units equipped with non-Bosch hard drives if the non-Bosch hard drives are source of the issues.

Parts included

Processor	
Processor	Intel Xeon Quad Core X3430 (2.4 GHz, 8 M Cache, 95 W)
Socket	1
Cache memory	1 x 8 MB Level 2 cache
Memory protection	ECC unbuffered
Max front side bus	1333 MHz

Memory	
Memory installed	4 GB, DDR3-1333 ECC UNB (2 x 2 GB)

Storage	
Storage type	8 Trays: 3.5-inch SATA
Hard Drives installed	DIP-7082-8HD: 16 TB, 2 TB SATA/300 7.200 RPM 3.5" DIP-7083-8HD: 24 TB, 3 TB SATA/300 7.200 RPM 3.5"
SAS RAID card	2108 based SAS/SATA RAID card – 8 internal ports/low profile-PCI-E
Graphics card	AMD FirePro V3900 1 GB, low profile
Sound card	Creative Sound Blaster PCI sound card
OS drive	Intel SSD 320 OVR, 80 GB (MLC)
DVD writer	Internal

Accessories	
Keyboard	EN-US (QWERTY)
Mouse	standard

System status
DIVAR IP 3000/7000 family comes fully loaded and fully functional with Microsoft Operating System and Bosch application pre-installed: Windows Storage Server 2008 R2, 64-bit; Bosch Video Management System; Bosch Video Recording Manager including Video Streaming Gateway; Dynamic Transcoding.

Technical specifications

Electrical	
AC input rating	100 to 240 V / 9 to 4 A / 50 to 60 Hz

Electrical 120 VAC input	
Actual output wattage from power supply	256.44 W
Efficiency of power supply	88%
Power consumption (w/o hard drives)	291.41 W
Power consumption (fully populated)	378 W approx
Total BTU/h	994.59
Power factor	.95
System AC input VA requirement	306.75 VA

Electrical 240 VAC input	
Actual output wattage from power supply	256.44 W
Efficiency of power supply	90%

Electrical 240 VAC input	
Power consumption (w/o hard drives)	284.94 W
Power consumption (fully populated)	373 W approx
Total BTU/h	972.49
Power factor	.92
System AC input VA requirement	309.71 VA

Mechanical	
Form factor	2HU rack mount
Power supply	740 W Platinum Level Redundant
USB ports	4 USB 2.0
Network	Dual Intel 82574L Gigabit LAN
Dimensions (H x W x D)	89 x 437 x 648 mm (3.5 x 17.2 x 25.5 in)
Weight	23.6 kg (52 lb)

Environmental	
Operating temperature	+10 °C to +35 °C (+50 °F to +95 °F)
Non-operating temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Operating relative humidity	8 to 90% (non-condensing)
Non-operating relative humidity	5 to 95% (non-condensing)

Additional information
Video clips for guided setup and configuration are available on the Security Systems Video Portal. http://video.boschsecurity.us/category/digital-recording/26

Ordering information

DIVAR IP 7000 2U, 8 x 2 TB HDD
All-in-one recording, viewing and management solution for network surveillance systems of up to 128 channels, 8 x 2 TB storage capacity
Order number **DIP-7082-8HD**

DIVAR IP 7000 2U, 8 x 3 TB HDD
All-in-one recording, viewing and management solution for network surveillance systems of up to 128 channels, 8 x 3 TB storage capacity
Order number **DIP-7083-8HD**

DIVAR IP 7000 2U, w/o HDD
All-in-one recording, viewing and management solution
for network surveillance systems of up to 128
channels, w/o HDD
Order number **DIP-7080-00N**

Accessories

DIVAR IP 6000/7000 Storage Expansion 2 TB
2 TB HDD
Order number **DLA-LDTK-200A**

DIVAR IP 6000/7000 Storage Expansion 3 TB
3 TB HDD
Order number **DIP-6703-HDD**

KBD-Universal XF Keyboard
USB CCTV-oriented keyboard for use with Bosch Video
Management System or DIVAR IP systems
Order number **KBD-UXF**

Software Options

DIVAR IP Professional Edition
Base expansion, 128 channels max
Order number **MBV-BXPAN-DIP**

DIVAR IP 8-Channnel Expansion
8-channel expansion (cameras/decoders)
Order number **MBV-XCHAN-DIP**

DIVAR IP Workstation Expansion
1 workstation expansion
Order number **MBV-XWST-DIP**

DIVAR IP DVR Expansion
1 DVR expansion
Order number **MBV-XDVR-DIP**

DIVAR IP CCTV Keyboard Expansion
1 keyboard expansion
Order number **MBV-XKBD-DIP**

DIVAR IP Forensic Search Expansion
1 Forensic Search expansion; you need one license per
storage device, not per camera or encoder
Order number **MBV-XFOR-DIP**

DIVAR IP Mobile Video Service Expansion
Mobile video service expansion
Order number **MBV-XMVS-DIP**

DIVAR IP Allegiant Matrix Connection
Allegiant license
Order number **MBV-FALG-DIP**

DIVAR IP ATM/POS Connection
ATM/POS license
Order number **MBV-FATM-DIP**

DIVAR IP OPC Server Connection for BIS
OPC server license
Order number **MBV-FOPC-DIP**