

# DIVAR IP 6000 1U

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Invented for life



- ▶ RAID-5 protected, all-in-one recording solution for up to 128 channels
- ▶ Pre-installed, pre-configured IP storage solution with up to 12 TB storage capacity
- ▶ Dedicated storage operating system delivers robust, secure operation
- ▶ Hot-swappable hard drives
- ▶ Remote monitoring via desktop application or browser

The DIVAR IP 6000 family is an affordable, simple and reliable all-in-one recording management solution for network surveillance systems of up to 128 channels (with 64 channels pre-licensed).

Powered by VRM Video Recording Manager software from Bosch, DIVAR IP 6000 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 6000 1U is a 1HU rack mount unit that combines advanced recording management and state-of-the-art iSCSI storage 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

The DIVAR IP 6000 family utilizes an energy efficient, embedded design which reduces possible points of failure and boasts Bosch quality through-and-through. Utilizing “surveillance-rated” hard drives in a fault tolerant RAID-5 configuration, redundant Gigabit Ethernet network interfaces, 4 GB system memory and

an Intel Pentium Dual Core Processor, the DIVAR IP 6000 family delivers high-end performance at a very affordable price.

Easy to install, 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-configured. Simply connect to the network and power the unit up – DIVAR IP 6000 is ready to begin recording straight out of the box.

To create a complete video management solution, just add either Video Client or Bosch Video Management System (Bosch VMS). Bosch VMS Lite – for up to 64 cameras – or Bosch VMS Professional Edition – for up to 128 cameras. Adding Bosch VMS or Video Client software turns DIVAR IP 6000 into a scalable IP video management solution.

Bosch VMS 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.

Video Client may be used as playback client only or to create an entry-level complete video management solution without the need of additional licenses.

## Functions

DIVAR IP 6000 1U features highly energy-efficient hot-swap redundant power supplies, as well as hot-swap SATA-II hard drives providing up to 12 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 Storage 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.

### Remote viewing

DIVAR IP 6000 comes with our advanced Video Client for remote viewing. Video Client is a Windows PC application for live viewing and playback including Configuration Manager which allows the settings of DIVAR IP 6000 be configured.

A stand-alone Archive Player will allow archive playback and authentication without any other workstation software.

### 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.

### Monitoring

The DIVAR IP 6000 family provide SNMP, Remote Desktop and HTTP monitoring support for the VRM recording management application and the system's hardware.

Increased reliability of high-availability hardware, embedded design as well system-wide monitoring and management ensure maximum uptime.

### 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 1U

## Installation/configuration notes

DIVAR IP 6000 1U comes pre-configured in a RAID-5 standard configuration with four LUNs and provides the following specifications:

Gross Capacity	Net Capacity	Bandwidth	BVIP Modules
w/o HDD	n/a	200 Mbit/s	64+
4 x 2 TB	5540 GB	200 Mbit/s	64+
4 x 3 TB	8280 GB	200 Mbit/s	64+

These values refer to the Bosch recording applications; Net capacity for a RAID-5 configuration without hot spare; 64+ concurrent iSCSI sessions indicate the number of concurrent recording sessions plus eight sessions for replay.

DIVAR IP 6000 may be upgraded once with an additional 64 channel license. The respective upgrade license has to be purchased. The upgrade allows for a maximum of 128+ sessions: 128 sessions for recording, eight sessions for replay.



### Notice

The DIVAR IP 6000 family only supports Divar 700 if an Uninterruptable Power Supply (UPS) is used. We strongly recommend using an "Online UPS" with an always active battery. The UPS must support Windows Storage Server 2008 R2 and must be sufficient to allow time to bring an auxiliary power source on line, or to properly shut down the DIVAR IP 6000 disk array(s).



### Notice

DIVAR IP 6000 is an all-in-one recording solution and does not include any video management or viewing application. Video management or viewing software must be installed on separate hardware (see DIVAR IP 3000 and DIVAR IP 7000 products).



### 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 Pentium G6950 Dual Core (3M Cache, 2.8 GHz)
Socket	1
Cache memory	1 x 3 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	4 Trays: 3.5-inch SATA
Hard Drives installed	DIP-6042-4HD: 8 TB, 2 TB 7.200 RPM 3.5" DIP-6043-4HD: 12 TB, 3 TB 7.200 RPM 3.5"
SAS RAID Card	AOC-SASLP-H8iR (8-Ports LSI 1078 SAS Controller)

## Technical specifications

Electrical	
AC input rating	100 to 140 V / 8.5 to 6.0 A / 50 to 60 Hz 180 to 240 V / 5.0 to 3.8 A / 50 to 60 Hz
Electrical 120 VAC input	
Actual output wattage from power supply	202.72 W
Efficiency of power supply	88%
Power consumption (w/o hard drives)	230.37 W
Power consumption (fully populated)	274 W approx
Total BTU/h	786.24
Power factor	.95
System AC input VA requirement	242.49 VA
Input current	2.02 A
Electrical 240 VAC input	
Actual output wattage from power supply	256.44 W
Efficiency of power supply	90%
Power consumption (w/o hard drives)	225.25 W

Electrical 240 VAC input	
Power consumption (fully populated)	269 W approx
Total BTU/h	768.77
Power factor	.92
System AC input VA requirement	244.83 VA
Input current	1.02 A

DIVAR IP 6000 comes fully loaded and fully functional with Microsoft Operating System and Bosch recording application pre-installed. DIVAR IP 6000 without pre-installed hard drives must be installed from the built-in DOM (Disk on Module) after the hard drive configuration has been completed. After the initial installation the system provides full functionality.

Mechanical	
Form factor	1HU rack mount
Power supply	700 W Gold Level Redundant
USB ports	4 USB 2.0: 2 in rear, 2 in front, (1 Type-A onboard)
Network	Dual Intel 82574L Gigabit LAN
Dimensions (H x W x D)	44.5 x 437 x 648 mm (1.7 x 17.2 x 25.5 in)
Weight	16.3 kg (36 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 6000 1U, 4 x 2 TB HDD

All-in-one recording management solution for network surveillance systems of up to 128 channels, 4 x 2 TB storage capacity

Order number **DIP-6042-4HD**

#### **DIVAR IP 6000 1U, 4 x 3 TB HDD**

All-in-one recording management solution for network surveillance systems of up to 128 channels, 4 x 3 TB storage capacity

Order number **DIP-6043-4HD**

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#### **DIVAR IP 6000 1U, w/o HDD**

All-in-one recording management solution for network surveillance systems of up to 128 channels, w/o HDD

Order number **DIP-6040-00N**

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#### **DIVAR IP 6000 Upgrade**

Upgrade license for 64 cameras (e-license)

Order number **DLA-XVRM-064**

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#### **Accessories**

#### **DIVAR IP 6000/7000 Storage Expansion 2 TB**

2 TB HDD

Order number **DLA-LDTK-200A**

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#### **DIVAR IP 6000/7000 Storage Expansion 3 TB**

3 TB HDD

Order number **DIP-6703-HDD**

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