

## DIVAR IP 7000 3U



The DIVAR IP 7000 family 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 BVMS solution and powered by 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 3U is a 3HU 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.

### System overview

The DIVAR IP 7000 family 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, 8 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. All components are pre-installed and pre-licensed. Simply



- ▶ RAID-5 protected (standard configuration), all-in-one video management solution for up to 256 channels
- ▶ Out-of-the-box IP video management solution with up to 128 TB storage capacity
- ▶ Instantly find what you are looking for
- ▶ Advanced user and alarm management
- ▶ 3 years hardware warranty, including next business day services

connect to the network and power the unit up - DIVAR IP is ready to begin recording straight out of the box.

BVMS 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 3U features highly energy-efficient hot-swap redundant power supplies, as well as front-swappable SATA-3 hard drives providing up to 128 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 2012 R2.

#### Instant real time access to video

View high quality HD and even UHD video despite low or limited bandwidth connections.

Dynamic Transcoding technology ensures you can view your video immediately - anytime, anywhere. The built-in transcoder supports up to 4 x UHD resolution video streams in parallel.

### Management

Once booted up the system will offer immediate access to the BVMS 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, BVMS Operator Client is included. For multiple systems, add them to BVMS Enterprise Management Server. Alternatively, use Video Security Client for viewing video from a separate workstation or mobile device.

### IT Management

Microsoft Windows Storage Server 2012 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 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.

In addition, DIVAR IP 7000 offers advanced monitoring and management options using the Intelligent Platform Management Interface (IPMI).

### Monitoring

The DIVAR IP 7000 family provides SNMP, Remote Desktop and HTTP monitoring support for the system's hardware and for the video management applications.

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

### Certifications and approvals

Region	Regulatory compliance/quality marks	
Europe	CE	DIVAR IP 7000
USA	UL	DIVAR IP 7000

### Installation/configuration notes

DIVAR IP 7000 3U comes pre-configured in a RAID-5 standard configuration with iSCSI LUNs (fully populated system only) and provides the following specifications:

### RAID-5 configuration

Gross Capacity	Net Capacity	Bandwidth*	IP Cameras
w/o HDD	n/a	475 Mbit/s	32+ pre-licensed / 128+ max.
16 x 3 TB	41885 GB	475 Mbit/s	32+ pre-licensed / 128+ max.
16 x 4 TB	55860 GB	475 Mbit/s	32+ pre-licensed / 128+ max.
16 x 6 TB	83790 GB	475 Mbit/s	32+ pre-licensed / 128+ max.
16 x 8 TB	111720 GB	475 Mbit/s	32+ pre-licensed / 128+ max.

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

These values refer to the BVMS recording engine; Net capacity for a RAID-5 configuration without hot spare; 32+/128+ connected IP cameras indicate the number of concurrent recordable cameras plus 8 sessions for replay.

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

Gross Capacity	Net Capacity	Bandwidth*	IP Cameras
w/o HDD	n/a	475 Mbit/s	32+ pre-licensed / 128+ max.
16 x 3 TB	39102 GB	475 Mbit/s	32+ pre-licensed / 128+ max.
16 x 4 TB	52136 GB	475 Mbit/s	32+ pre-licensed / 128+ max.
16 x 6 TB	78204 GB	475 Mbit/s	32+ pre-licensed / 128+ max.
16 x 8 TB	104272 GB	475 Mbit/s	32+ pre-licensed / 128+ max.

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

### RAID-6 configuration

Gross Capacity	Net Capacity	Bandwidth*	IP Cameras
w/o HDD	n/a	475 Mbit/s	32+ pre-licensed / 128+ max.

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16 x 3 TB	39102 GB	475 Mbit/s	32+ pre-licensed / 128+ max.
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16 x 6 TB	78204 GB	475 Mbit/s	32+ pre-licensed / 128+ max.
16 x 8 TB	104272 GB	475 Mbit/s	32+ pre-licensed / 128+ max.

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

Storage may be increased by adding up to 4 DIVAR IP 6000 units as expansion.

#### System status

DIVAR IP 7000 comes fully loaded and fully functional with Microsoft Operating System and Bosch applications: Windows Storage Server 2012 R2, 64-bit; BVMS; Video Recording Manager including Video Streaming Gateway; Dynamic Transcoding.

DIVAR IP 7000 without pre-installed hard drives:

The RAID configuration of third-party data hard drives must be set up manually via the pre-installed RAID management utility. Only after this manual RAID configuration the system provides full functionality.

#### **i** Notice

Uninterruptable Power Supply (UPS). We strongly recommend using an "Online UPS" with an always active battery. The UPS must support Windows Storage Server 2012 R2 and must be sufficient to allow time to bring an auxiliary power source on line, or to properly shut down the DIVAR IP disk array(s).

#### **i** Notice

Bosch is not liable for system failures of units equipped with third-party hard drives if the third-party hard drives are source of the issues. Such drives are not covered by the 3 years warranty.

#### **i** Notice

##### Hardware warranty

The next business day on-site service level can only be provided if the respective system 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 (registration form) or from the Bosch online product catalog. Next business day services cannot be provided in every country everywhere. For limitations and exceptions see the registration details in the registration form.

#### **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.

### Technical specifications

Electrical	
AC input rating	100 to 240 V / 50 to 60 Hz
Electrical 140 VAC input	
Input current	3.3 A
Actual output wattage from power supply	413.9 W
Efficiency of power supply	92%
Power consumption*	449.9 W
Total BTU/h	1535.4
Power factor	0.98
System AC input VA requirement	459.0 VA

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

Electrical 240 VAC input	
Input current	1.9 A
Actual output wattage from power supply	413.9 W
Efficiency of power supply	94%
Power consumption*	440.3 W
Total BTU/h	1502.7

Electrical 240 VAC input	
Power factor	0.96
System AC input VA requirement	458.6 VA
*System power consumption may vary based on workload and environment.	
Mechanical	
Form factor	3HU rack mount
Power supply	1200 W Platinum Level Redundant
USB ports	Front: 2 USB 2.0 ports Rear: 2 USB 2.0 ports, 2 USB 3.0 ports
Network	Dual Intel i210AT Gigabit LAN (teamed) 1 IPMI BMC port
Dimensions (H x W x D)	132 x 437 x 648 mm (5.2 x 17.2 x 25.5 in)
Weight	32.7 kg (72 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)
Processor	
Processor	Intel Xeon Processor E3-1275 V3 (8 MB Cache, 3.5 GHz)
Socket	1
Cache memory	8 MB Intel Smart Cache
Memory protection	ECC unbuffered
Max front side bus	1600 MHz
Memory	
Memory installed	8 GB, DDR3-1666 ECC UNB (1 x 8 GB)
Storage	
Storage Type	16 Trays: 3.5-inch SATA
Hard Drives Installed	
• Data	SATA-3, 7200 RPM, 64 MB, 3.5", RAID-5 configuration (default)

Storage	
	DIP-71F3-16HD: 16 x 3 TB DIP-71F4-16HD: 16 x 4 TB DIP-71F6-16HD: 16 x 6 TB DIP-71F8-16HD: 16 x 8 TB DIP-71F0-00N: w/o HDD
• OS	2 x 120 GB SSD RAID-1 configuration
SAS RAID Card	8 ports LSI 3108 SAS3 controller
Graphics	4 x Mini Display Port
Sound card	5.1 Channel 24-bit
DVD writer	Internal

### Ordering information

#### DIP-71F3-16HD Appliance 16x3TB

All-in-one recording, viewing and management solution for network surveillance systems.

For up to 128 channels and with 16 x 3 TB storage capacity.

Order number **DIP-71F3-16HD | F.01U.314.526**

#### DIP-71F3SFH-POS DIP-71F3-16HD SRV Ext. 12 Mths POS

12-month warranty extension for DIP-71F3-16HD

Order number **DIP-71F3SFH-POS | F.01U.344.901**

#### EWE-71F3SFH-IW DIP-71F3-16HD SRV Ext. 12 Mths IW

12 months warranty extension

Order number **EWE-71F3SFH-IW | F.01U.341.243**

#### DIP-71F4-16HD Appliance 16x4TB

All-in-one recording, viewing and management solution for network surveillance systems.

For up to 128 channels and with 16 x 4 TB storage capacity.

Order number **DIP-71F4-16HD | F.01U.314.527**

#### DIP-71F4SFH-POS DIP-71F4-16HD SRV Ext. 12 Mths POS

12-month warranty extension for DIP-71F4-16HD

Order number **DIP-71F4SFH-POS | F.01U.344.902**

#### EWE-71F4SFH-IW DIP-71F4-16HD SRV Ext. 12 Mths IW

12 months warranty extension

Order number **EWE-71F4SFH-IW | F.01U.341.244**

#### DIP-71F6-16HD Appliance 16x6TB

All-in-one recording, viewing and management solution for network surveillance systems.

For up to 128 channels and with 16 x 6 TB storage capacity.

Order number **DIP-71F6-16HD | F.01U.329.145**

#### DIP-71F6SFH-POS DIP-71F6-16HD SRV Ext. 12 Mths POS

12-month warranty extension for DIP-71F6-16HD

Order number **DIP-71F6SFH-POS | F.01U.344.903**

**EWE-71F6SFH-IW DIP-71F6-16HD SRV Ext. 12 Mths IW**

12 months warranty extension

Order number **EWE-71F6SFH-IW | F.01U.341.245****DIP-71F8-16HD Appliance 16x8TB**

All-in-one recording, viewing and management solution for network surveillance systems.

For up to 128 channels and with 16 x 8 TB storage capacity.

Order number **DIP-71F8-16HD | F.01U.329.146****DIP-71F8SFH-POS DIP-71F8-16HD SRV Ext. 12 Mths POS**

12-month warranty extension

for DIP-71F8-16HD

Order number **DIP-71F8SFH-POS | F.01U.344.904****EWE-71F8SFH-IW DIP-71F8-16HD SRV Ext. 12 Mths IW**

12 months warranty extension

Order number **EWE-71F8SFH-IW | F.01U.341.246****DIP-71F0-00N Appliance, no HDD**

All-in-one recording, viewing and management solution for network surveillance systems.

For up to 128 channels and without HDD.

Order number **DIP-71F0-00N | F.01U.314.525****DIP-71F0S0N-POS DIP-71F0-00N SRV Ext. 12 Mths POS**

12-month warranty extension

for DIP-71F0-00N

Order number **DIP-71F0S0N-POS | F.01U.344.900****EWE-71F0S0N-IW DIP-71F0-00N SRV Ext. 12 Mths IW**

12-month hardware service extension next business day for DIP-71F0-00N or DIP-72G0-00N, available for a 4th or a 4th and 5th year as a standard.

Order number **EWE-71F0S0N-IW | F.01U.341.242****Accessories****DIP-6703-HDD Hard disk 3TB for DIVAR IP 6000/7000**

Hard disk storage expansion with a capacity of 3 TB.

Order number **DIP-6703-HDD | F.01U.291.794****DIP-6704-HDD Hard disk 4TB for DIVAR IP 6000/7000**

Hard disk storage expansion with a capacity of 4 TB.

Order number **DIP-6704-HDD | F.01U.308.459****DIP-6706-HDD Hard disk 6TB for DIVAR IP 6000 7000**

Hard disk storage expansion with a capacity of 6 TB.

Order number **DIP-6706-HDD | F.01U.330.152****DIP-6708-HDD Hard disk 8TB for DIVAR IP 6000 7000**

Hard disk storage expansion with a capacity of 8 TB.

Order number **DIP-6708-HDD | F.01U.330.153****KBD-UXF Keyboard, USB CCTV-oriented**

USB CCTV-oriented keyboard for use with BVMS, BIS - Video Engine, or DIVAR IP systems.

Order number **KBD-UXF | F.01U.279.328****Represented by:****Europe, Middle East, Africa:**

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