



# DVSA Premium Series Digital Video Storage Array



- ▶ **Preconfigured RAID 5 protection with up to 7.5 Terabytes of video storage**
- ▶ **Eight or sixteen bays for hot-swappable 3 Gbps SATA hard disk drives**
- ▶ **Redundant hot-swappable power supplies and dual-host capability for two DVRs**
- ▶ **DVSA management using Bosch RAIDWatch GUI**
- ▶ **Dual SCSI U-320 interface**
- ▶ **Modular design for simple service**
- ▶ **2 and 3 HU 19" rack mount chassis**

The DVSA Premium series, Bosch Digital Video Storage Array, is built for the security industry's most demanding digital video storage applications, providing high capacity, unlimited flexibility and unmatched reliability.

## Functions

Bosch DVSA satisfies the ever increasing demands of CCTV for video – high speed recording, high performance playback, uninterruptable reliability and massive capacities. With complete RAID 5 protection and SATA hard drives, it is ideally suited for when the highest level of data availability is demanded.

The "Premium" models are fully featured RAID 5 disk arrays. With the focus on nonstop reliability all critical components (including the drive trays, power supply units and cooling modules) are hot-swappable within the cableless modular chassis.

Bosch DVSA "Premium" models are also designed for expansion. Dual-stack connectors allow for daisy-chaining the disk arrays for when extremely large capacities are required per DVR or NVR. Alternatively 2 DVRs can share a single DVSA disk array using the dual-host capacity, which improves the cost-effectiveness of the RAID-based solution.

In the event of failure, the Bosch Digital Video Storage Array sounds an audible alarm to notify a user. The units also ensure that system managers are constantly updated on

status via a choice of channels, including email, fax, LAN broadcast, SNMP traps, MSN Messenger, ICQ and SMS messages. The choice of channel depends on the infrastructure in place and user preferences.

Up to 8 or 16 SATA drive channels are routed through the backplane board to the lockable drive trays installed on the front panel of the Bosch DVSA. The completely cableless, backplane-based design eliminates problems associated with cable connections and offers a higher level of serviceability.

Bosch DVSA supports multiple RAID configurations, each with distinct write policy, stripe size and optimization modes. Hot rebuild and numerous fault correction mechanisms ensure the highest standard of RAID protection. Each unit has a battery backup unit (BBU) installed to prevent data loss during a power failure. Combined with comprehensive firmware features, the Bosch Digital Video Storage Arrays ensure maximum reliability and exceptional data availability in today's data intensive video storage environments. A highly reliable storage solution is assured by factory burn-in procedures and extensive selection process for hard disk drives, covered by the Bosch 3 year warranty program.

## Installation/Configuration Notes



DVSA rear view

The Bosch RAIDWatch Manager is a Java-based RAID management software that provides a user-friendly graphical interface for configuring and monitoring RAID systems. The program is specifically designed to manage Bosch DVSA.

Bosch RAIDWatch simplifies the otherwise complicated process of array configuration, giving system integrators a wide range of convenient RAID management options. The Bosch DVSA is equipped with an Ethernet port for local and remote management. The software gives system administrators fingertip control to instantly deploy, configure, manage and monitor multiple storage subsystems at local or remote locations. The “Install Once, Run Anywhere” convenience saves time and ensures continuous operation. With WAN/LAN support an operator can manage multiple Bosch DVSA from a single workstation.

## Technical Specifications

### Electrical

Model No.	No. of Hard Drives	Voltage Range	Operating Power*
DVA-08K-040 50RA	4 x 500 GB	120/240 VAC 50/60 Hz	350 W
DVA-08K-080 50RA	8 x 500 GB	120/240 VAC 50/60 Hz	350 W
DVA-16K-160 50RA	16 x 500 GB	120/240 VAC 50/60 Hz	460 W

\*Power is based on the unit's maximum operating conditions.

Peak Current	
	08K: 6A @ 115 VAC or 3A @ 230 VAC 16K: 10A @ 115 VAC or 5A @ 230 VAC

### Accessories

Required cables (not supplied with the array)

Divar	DVA-ACON-HD50A
DiBos	DVA-ACON-HD68A
NVR	DVA-ACON-VD68A

Required every year (1 preinstalled in the array)

Battery backup	DVA-SBBK-00A
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The DVSA includes a controller board, power supply, and a specified number of hard disks. Additional accessories are optional, for redundancy, hot spare or installation. For installation into a rack, a slider rail must be used.

Item	Type #
Hard Disk assembly (500 GB)	DVA-ADTK-050A
Loop-through cable (0.5m)	DVA-ACON-VD680A
Power supply 8 bay array	DVA-SPKK-08A
Power supply 16 bay array	DVA-SPKK-16A
Fan module 8 bay array	DVA-SFAK-08A
Fan module 16 bay array	DVA-SFAK-16A
Dual channel SCSI controller 8 bay array	DVA-SCDK-08A
Dual channel SCSI controller 16 bay array	DVA-SCDK-16A
Slider rail for cabinet 533 to 724 mm 8 Bay	DVA-ASRK-28A
Slider rail for cabinet 647 to 900 mm 8 Bay	DVA-ASRK-36A
Slider rail for cabinet 521 to 812 mm 16 Bay	DVA-ASRK-32A
Slider rail for cabinet 600 to 900 mm 16 Bay	DVA-ASRK-35A

### Compatible Bosch DVRs and NVRs

Divar
DiBos
NVR

**Mechanical****Connectors**

Power	IEC Male
RS-232 (Serial) Port	DB-9 Male, for upgrade and service
Host Ports	2 x manual-terminating, Ultra SCSI-320
Loop-through	2 x Ultra SCSI-320 Divar: Connect max. 2 arrays Dibos & NVR: Connect max. 3 arrays
Network	RJ45, Ethernet 10/100 Base-T compatible

**Dimensions (W x H x D)**

8 bay Array	446 x 88 x 490 mm 17.6 x 3.5 x 19.3 inches
16 bay Array	445 x 130 x 488 mm 17.6 x 5.1 x 19.3 inches

**Weight**

8 bay Array	32.5 kg, (71.6 lb) approx.
16 bay Array	46 kg, (101.4 lb) approx.

**Environmental**

**Operating Temperature** 0 °C to 40 °C (32 °F to 104 °F)

**Electromagnetic Compatibility (EMC)**

Complies with FCC and CE Regulations

**Product Safety** CE, UL, CB, EN, and IEC

**Warranty (excl battery)** 3 years

**Warranty battery backup unit** 1 year

**Ordering Information**

DVA-ADTK-050A DISKARRAY DVA HARDDRIVE+TRAY 500GB	DVAADTK050A
DVA-SPKK-08A DISKARRAY PSU PREMIUM 350W	DVA-SPKK-08A
DVA-SPKK-16A DISKARRAY PSU 16BAY PREMIUM 460W	DVASPKK16A
DVA-SFAK-08A DISKARRAY FAN MODULE 8+12BAY	DVASFAK08A
DVA-SFAK-16A DISKARRAY FAN MODULE 16BAY	DVASFAK16A
DVA-SCDK-08A DISKARRAY CONTROLLER DVA-08K	DVASC DK08A
DVA-SCDK-16A DISKARRAY CONTROLLER DVA-16K	DVASC DK16A
DVA-ASRK-28A DISKARRAY 2U SLIDERRAIL 21-28.5IN	DVAASRK28A
DVA-ASRK-32A DISKARRAY 16BAY SLIDERRAIL 24-32IN	DVAASRK32A
DVA-ASRK-35A DISKARRAY 16BAY SLIDERRAIL 26-36IN	DVAASRK35A
DVA-ASRK-36A DISKARRAY 2U SLIDERRAIL 25.5-36IN	DVAASRK36A

**Ordering Information**

DVA-08K-04050RA DISKARRAY PREM SCSI 8BAY-4 HDD 2TB	DVA08K04050RA
DVA-08K-08050RA DISKARRAY PREM SCSI 8BAY-8 HDD 4TB	DVA08K08050RA
DVA-16K-16050RA DISKARRAY PREM SCSI 16BAY-16 HDD 8TB	DVA16K16050RA

**Accessories**

DVA-ACON-HD50A DISKARRAY CABLE SCSI 0.5M HD50-VHDCI	DVAACONHD50A
DVA-ACON-HD68A DISKARRAY CABLE SCSI 1M HD68-VHDCI	DVAACONHD68A
DVA-ACON-VD68A DISKARRAY CABLE SCSI 1M VHDCI-VHDCI	DVAACONVD68A
DVA-ACON-VD680A DISKARRAY CABLE SCSI 0.5M VHDCI-VHDCI	DVAACONVD680A
DVA-SBBK-00A DISKARRAY DVA BATTERY BACKUP MODULE	DVASBBK00A

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