

DLA-AIOL0 1400 Series IP Video Storage Array

www.boschsecurity.com



BOSCH
Invented for life



- ▶ RAID-5 protected, all-in-one recording solution for up to 64 channels
- ▶ Pre-installed, pre-configured IP storage solution with 4 TB (4 x 1 TB) storage capacity
- ▶ Dedicated storage operating system delivers robust, secure operation
- ▶ Hot-swappable hard drives
- ▶ Remote monitoring via desktop application or browser

The 1400 Series IP Video Storage Appliance is an affordable, simple and reliable all-in-one recording management solution for network surveillance systems of up to 64 cameras. Powered by Bosch VRM (Video Recording Manager) software, the 1400 Series 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%.

DLA-AIOL0 is a 1U 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 1400 Series IP Video Storage Appliance 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 DLA 1400 Series delivers high-end performance at a very affordable price. Easy to install, the DLA 1400 Series features wizard-based set-up and centralized configuration to reduce installation times by as much as 50%. All components are pre-installed and pre-configured. Simply connect to the network and power the unit up—the 1400 Series is ready to begin recording straight out of the box. To create a complete video management solution, just add either Bosch Video Client or Bosch Video Management System (VMS). Bosch VMS Lite—for up to 64 cameras—or Bosch VMS Professional Edition—for up to 128 cameras. Adding Bosch Video Management System or Bosch Video Client software turns the 1400 Series into a scalable IP video management solution.

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.

Bosch Video Client may be used as playback client only or to create an entry-level complete video management solution of up to 64 channels.

Functions

The 1400 Series features a single-socket-system, server-class motherboard, highly energy-efficient hot-swap redundant power supplies, as well as hot-swap SATA-II hard drives providing 4 TB of gross storage capacity. All system software is pre-installed and pre-activated—creating an out-of-the-box ready-to-use recording appliance. The DLA 1400 Series utilizes Microsoft Windows Storage Server 2008. Windows Storage Server is a proven operating system platform that has been specifically optimized for storage applications. The Microsoft implementation of iSCSI is a reference in the industry. It delivers the highest possible quality and reliability, and is a field-proven technology installed on millions of servers worldwide. This next generation of Windows Storage Server is focused on providing a secure platform:

- Hardened platform with reduced high risk layers
- Prevent abnormal activity in the file system and registry
- Re-architected platform to reduce corruption and compromise of the system
- Windows Service Hardening
- Windows Firewall with Advanced Security
- Enhanced and improved TCP/IP Stack

Windows Storage Server is a **dedicated OS** for Storage that has a significantly reduced attack surface than a normal Windows Server. It does not run any exposed applications like email, browser or media player and has a reduced set of services.

Management

Microsoft Windows Storage Server 2008 provides a simple, intuitive user interface for system configuration and unified storage appliance management. Administrators and IT professionals will appreciate the ability to manage the Bosch 1400 Series 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 1400 Series provide SNMP, Remote Desktop and HTTP monitoring support for the Bosch 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 years of 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	DLA-AIOL 1400 Series
USA	UL	DLA-AIOL 1400 Series

Installation/Configuration Notes

The 1400 Series comes pre-configured in a RAID-5 standard configuration with 4 LUNs and provides the following specifications:

Gross Capacity	Net Capacity	Bandwidth	iSCSI Sessions
4 x 1 TB	2690 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 8 sessions for replay. The 1400 Series 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, 8 sessions for replay.



Notice

The 1400 Series 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 and must be sufficient to allow time to bring an auxiliary power source on line, or to properly shut down the 1400 Series disk array(s).



Notice

The 1400 Series 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.



Notice

Bosch is not liable for system failures of DLA 1400 Series units without internal hard drives (available in the Asia-Pacific-Region only).

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	4 TB, WD 1.0 TB 7.200 RPM 32 M 3.5"
SAS RAID Card	AOC-SASLP-H8iR (8-Ports LSI 1078 SAS Controller)

Technical Specifications

Electrical	
120 VAC Input	
Actual output wattage from power supply	202.72 W
Efficiency of power supply	88%
Total system power consumption	230.37 W
Total BTU/h	786.24
Power Factor	.95
System AC input VA requirement	242.49 VA
Input current	2.02 A
240 VAC Input	
Actual output wattage from power supply	256.44 W
Efficiency of power supply	90%
Total system power consumption	225.25 W
Total BTU/h	768.77
Power Factor	.92
System AC input VA requirement	244.83 VA
Input current	1.02 A

The 1400 Series comes fully loaded and fully functional with Microsoft Operating System and Bosch recording application pre-installed

Mechanical	
Form Factor	1 U Rack Mount (815TQ-R700)

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® 82573 Gigabit LAN
Dimensions (H x W x D)	437 x 44.5 x 648 mm (17.2 x 1.7 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)

Ordering Information

DLA-AIOL0-04AT

1400 Series IP Video Storage Array, 4 x 1 TB
Order number **DLA-AIOL0-04AT**

DLA-AIOL0-000N

1400 Series IP Video Storage Array, Empty Chassis
(Asia-Pacific-Region only)
Order number **DLA-AIOL0-000N**

DLA-XVRM-064

AIO-upgrade license for 64 cameras (e-license)
Order number **DLA-XVRM-064**

Accessories

DLA-LDTK-100A

1000 GB HDD
Order number **DLA-LDTK-100A**

Represented by:

Americas:

Bosch Security Systems, Inc.
130 Perinton Parkway
Fairport, New York, 14450, USA
Phone: +1 800 289 0096
Fax: +1 585 223 9180
security.sales@us.bosch.com
www.boschsecurity.us

Europe, Middle East, Africa:

Bosch Security Systems B.V.
P.O. Box 80002
5617 BA Eindhoven, The Netherlands
Phone: + 31 40 2577 284
Fax: +31 40 2577 330
emea.securitysystems@bosch.com
www.boschsecurity.com

Asia-Pacific:

Robert Bosch (SEA) Pte Ltd, Security
Systems
11 Bishan Street 21
Singapore 573943
Phone: +65 6571 2808
Fax: +65 6571 2699
apr.securitysystems@bosch.com
www.boschsecurity.asia

China:

Bosch (Shanghai) Security Systems Ltd.
201 Building, No. 333 Fuquan Road
North IBP
Changning District, Shanghai
200335 China
Phone +86 21 22181111
Fax: +86 21 22182398
www.boschsecurity.com.cn

America Latina:

Robert Bosch Ltda Security Systems Division
Via Anhanguera, Km 98
CEP 13065-900
Campinas, Sao Paulo, Brazil
Phone: +55 19 2103 2860
Fax: +55 19 2103 2862
al.securitysystems@bosch.com
www.boschsecurity.com