DS RealVue RAID Real-Time DVMS
INTEGRAL DIGITAL SENTRY® BROADCAST-QUALITY DVMS

Product Features

- 8-, 16-, or 32-Input Digital Video Management System (DVMS)
- MPEG-4 Video Compression
- Up to 720 x 480 (NTSC), 720 x 576 (PAL) Recording Resolution on 32 Channels Simultaneously at 30 Images per Second (ips) (NTSC), 25 ips (PAL)
- Supports Pelco IP Cameras with Sarix™ HD Technology
- Supports the Recording of H.264 Streams from IP Cameras
- Redundant, Mirrored Data Storage for Fail-Safe Retention of Operating System, Video, and Audio Data
- Hot-Swappable Hard Drives to Avoid System Interruption or Video Loss
- Dynamic Camera Settings Based on Status, Including Alarm, Event, or Schedule
- Resolution, Quality, and Recording Rate Configurable per Individual Camera
- Integral Digital Sentry® Video Monitoring Software
- Support for up to 16 Standard IP Video Devices
- Detailed Reporting of System Settings and Configuration Changes
- Quick Export of Video to DVD Using the Easy Evidence Blue Button
- Easy Playback of Exported Video Without Additional Media Player
- 3-Year Limited Warranty
- Up to 32 Audio Inputs
- Simultaneous Display of Live Video and Replay of Alarm Event
- Variable Video Expiration

- Digital Zoom and On-Screen Pan/Tilt/Zoom (PTZ) Controls
- Email Notification of Alarm Events and System Messages
- Video Authentication
- Third-Party Integration with Over 25 Industry-Leading Devices
- Support for DS DataPoint Integration

DS RealVue Digital Video Management Solutions (DVMS) are the security industry's most powerful 32-channel real-time digital video recorders. **DS RealVue RAID** can simultaneously record video from 32 cameras at 30 ips NTSC (25 ips PAL) at full D1 resolution. DS RealVue products are HD-enabled, capable of recording and displaying exceptional high-quality images captured by Pelco IP cameras with Sarix™ HD technology. This tight integration between product and technology makes DS RealVue a robust HD end-to-end solution. These broadcast-quality recorders are equipped with the Integral Digital Sentry® feature set required by high-security applications such as gaming, money counting, and corrections. MPEG-4 compression provides excellent image quality, smaller storage requirements, and reduced network bandwidth. DS RealVue recorders can seamlessly integrate with existing Digital Sentry management systems, combining real-time recorders with systems that record at lower frame rates to meet unique customer demands.

DS RealVue RAID offers a high level of fault tolerance and redundancy. Power supplies and hard drives are hot-swappable, so that the operating system data and recorded data remain safe and intact while the system continues to record. The internal RAID 10 or RAID 5 hard drives provide full redundancy of the operating system,

video, and audio data. The unique external input/output (XIO) panel centralizes all video and audio connection points so that upgrade and service access is quick and simple. **DS RealVue RAID** reduces overall equipment space requirements by supporting up to 48 total cameras (32 analog and 16 IP) and up to 32 channels of audio in one recorder. The smaller file size increases the number of days of video that can be stored locally on a single system, lowering the overall system cost and making **DS RealVue RAID** an unmatched value in real-time video recording.

DS RealVue RAID is available in 8-, 16-, and 32-channel configurations. This hybrid solution supports up to 16 additional IP channels when connected to the same unit as the analog cameras. **DS RealVue RAID** also supports 32 channels of audio, which can be searched, played back, and exported in sync with video.

DS RealVue RAID supports the IT-focused Digital Sentry software suite that includes network health and event monitoring, video analytics, and archive utility.

TECHNICAL SPECIFICATIONS

SYSTEM

Operating System	Windows® XP Professional
User Interface	Digital Sentry Client or DS ControlPoint
Internal Storage	1 TB RAID 10 or 1.5 TB RAID 5 (not available on -8080 models)

VIDEO/AUDIO

Video Standards	NTSC/PAL	
Video Encoding	MPEG-4	
Video Decoding	iVEX, MPEG-4, MJPEG, wavelet	
Video Resolutions		
Analog Cameras	NTSC	PAL
D1	720 x 480	720 x 576
2CIF	720 x 240	720 x 288
CIF	352 x 240	352 x 288
IP Channels	NTSC	PAL
HD	Up to 5 megapixels (NTSC and PAL)	
4CIF	704 x 480	704 x 576
CIF	352 x 240	352 x 288
Analog Camera Inputs	8, 16, or 32	
IP Camera Capacity	16	
Recording Rate per Channel	30 ips (NTSC), 25 ips (PAL)	
Audio Channels	Up to 32	
Codec	MPEG1 Layer 2	
Bits per Second	32 to 192 Kbps	
Sampling Frequency	32 kHz	

AUXILIARY CONNECTORS

PTZ Interface	RS-232, RS-422, RS-485
Network	10/100/1000Base-T
Alarm Inputs	15 dry contact
Relay Output	1 Form C

MECHANICAL

Connectors

Terminal Blocks	Input triggers, audio inputs, RS-422/RS-485, output relays
Dual-DB15, RCA	Video inputs and output (expansion cable included)
DB37	Input triggers, audio inputs, RS-422/RS-485, output relays (expansion cable required)
XIO Panel	BNC for video in, video out; terminal blocks for input/output triggers, audio inputs, RS-422/RS-485
USB	4 high-speed USB 2.0 ports; connect mouse and keyboard
DB15	VGA port
RJ-45	Dual 10/100/1000 Megabit Ethernet ports
6-Pin Mini-DIN	PS/2 mouse and keyboard
Audio Connectors	Miniature phono plug for line in, line out, and microphone in
DB25	Printer (parallel)

Optional I/O Connectors

Audio Levels	
Input	Line-level input
Output	Line-level output
Audio Connectors	Terminal block
Audio Inputs	Up to 32
Trigger Connectors	Terminal block
Trigger Inputs	Transistor-transistor logic (TTL), dry contact to GND
Outputs	Form C relay, contact closure
RS-422/RS-485	Terminal block

POWER

Input Voltage	100 to 240 VAC ±10%, 50/60 Hz
Power Consumption	340 W (280 W sustaining)

PHYSICAL

DS RealVue RAID	
Dimension	23" D x 19" W x 7" H (4RU) (58.42 x 48.26 x 17.78 cm)
Unit Weight	57 lb (25.9 kg)
Shipping Weight	77 lb (34.9 kg)
XIO Panel	
Dimension	4.0" D x 19.0" W x 3.3" H (2RU) (10.16 x 48.26 x 8.38 cm)
Unit Weight	4 lb (1.8 kg)
Shipping Weight	6 lb (2.7 kg)

ENVIRONMENTAL

Operating Temperature	50° to 95°F (10° to 35°C)
Storage Temperature	-40 to 149°F (-40 to 65°C)
Operating Humidity	20% to 80%, noncondensing
Operating Altitude	-50 to 10,000 ft (-15 to 3,048 m)
Operating Vibration	0.25 G at 3 Hz to 200 Hz at a sweep rate of 0.5 octave/min.

REMOTE PC CLIENT REQUIREMENTS

Processor	
Minimum	Pentium® 2.4 GHz with Hyper-Threading Technology
Recommended	Intel® Core™2 Duo 2.4 GHz
Internal Memory	
Minimum	512 MB
Recommended	2 GB
Operating System	
Minimum	Windows XP Home or Windows Vista®
Recommended	Windows XP Professional SP 2
Video System	
Minimum	128 MB RAM with DirectX® 9.0c
Recommended	Dual-head, 256 MB RAM with DirectX 9.0c

CERTIFICATIONS

- CE, Class A
- FCC, Class A
- UL Listed

TECHNICAL SPECIFICATIONS

MODELS

Systems Without Internal Data Storage (External Storage Required)

DSX08-8080	8 video inputs, 240 ips
DSX16-8080	16 video inputs, 480 ips
DSX32-8080	32 video inputs, 960 ips

Systems with Redundant Internal Data Storage

DSX084500	8 video inputs, 240 ips, 1000 GB RAID 10 internal storage
DSX084500-5	8 video inputs, 240 ips, 1500 GB RAID 5 internal storage
DSX164500	16 video inputs, 480 ips, 1000 GB RAID 10 internal storage
DSX164500-5	16 video inputs, 480 ips, 1500 GB RAID 5 internal storage
DSX16164500	16 video inputs/looping outputs, 480 ips, 1000 GB RAID 10 internal storage
DSX16164500-5	16 video inputs/looping outputs, 480 ips, 1500 GB RAID 5 internal storage
DSX324500	32 video inputs, 960 ips, 1000 GB RAID 10 internal storage
DSX324500-5	32 video inputs, 960 ips, 1500 GB RAID 5 internal storage

NOTE: For a DS RealVue RAID system configured as a video acquisition unit (VAU) for use with a Data Management Server (DMS), add "-V" to the end of the model number (not available with -8080 models). For example, valid model numbers include DSX084500-V and DSX084500-5-V.

SUPPLIED ACCESSORIES

USB Keyboard
USB Mouse
Power Cord
Keys
Resource Disc
Recovery Disc
Documentation Disc
XIO Panel
XIO Cable
DB-37 Cable
RS-422 Cable
Cat5 Cable
P-140 Converter

OPTIONAL ACCESSORIES

KBD300A	KBD300A Desktop keyboard with full switching and programming capabilities, plus joystick control of PTZ functions
KBDKIT	Remote keyboard wiring kit. Required when using a single keyboard in ASCII Mode. Includes two RJ-45 wall blocks and one 120 VAC to 12 VAC transformer. Maximum cable distance for RS-422/RS-485 communication over 24-gauge wire is 4,000 feet (1,219 m). Use shielded twisted pairs cable that meets basic requirements for RS-422/RS-485 applications. (One wall block and transformer is required for each keyboard.)
KBDKIT-X	Same as KBDKIT except includes 230 VAC to 12 VAC transformer
PV140	RS-422/RS-232 converter kit with 12 VDC power supply

TECHNICAL SPECIFICATIONS

OPTIONAL DS REALVUE RAID HARDWARE

DSRVXIO16-SP	Spares kit for 16-channel DS RealVue RAID
DSRVXIO32-SP	Spares kit for 32-channel DS RealVue RAID
3590-40046	500 GB hard drive upgrade kit

DS REALVUE RAID UPGRADES

3590-40043	Upgrade from 8 to 16 video channels
3590-40044	Upgrade from 8 to 32 video channels
3590-40045	Upgrade from 16 to 32 video channels

IP CAMERA LICENSES
(Required for Each Connected IP Camera)

DS-SW-CAM	IP camera license for IP camera or analog camera connected to IP encoder
DS-SW-CAM-P	IP camera license if camera or device is purchased from Pelco
DS-SW-CAM-P4	IP camera license for IP quad camera or 4-port converter if purchased from Pelco

OPTIONAL EXTERNAL STORAGE
(Available Only with 8080 Storage Capacity)

3530-10030-ADD	SATABoy™ external storage, 8 drives, hot-swappable 3.0 TB RAID 5
3530-10031-ADD	SATABoy external storage, 14 drives, hot-swappable 6.0 TB RAID 5
3590-00411	SATABoy SATA 500 GB hard drive (includes carrier)
3590-01055	SATABoy daisy chain SCSI cable
6990-00299	SATABoy power supply
3590-01059	SATABoy spare parts kit (includes daisy chain cable, power supply, and 500 GB hard drive)
3530-10040-ADD	SATABeast™ external storage, 42 drives, hot-swappable 18.0 TB RAID 5
3590-00041	SATABeast SATA 500 GB hard drive (includes carrier)
3590-00042	SATABeast 3-meter fiber cable
3590-00043	SATABeast power supply
3590-00044	SATABeast spare parts kit (includes fiber cable, power supply, and 500 GB hard drive)

3530-10051-ADD	SATA 404S, 4 drives, hot-swappable 1.5 TB RAID 5
3530-10052-ADD	SATA 404S, 4 drives, hot-swappable 2.0 TB JBOD
3530-10053	SATA 404S SATA 500 GB hard drive (includes carrier)
3530-10054	SATA 404S daisy chain SCSI cable (DVMS to storage)
3530-10055	SATA 404S daisy chain SCSI cable (storage-to-storage)
3530-10056	SATA 404S power supply (not hot-swappable)
3530-10057	SATA 404S spare parts kit (includes two daisy chain cables, power supply, and 500 GB hard drive)

OPTIONAL SOFTWARE

AUSRV-SW-1L	Archive utility server software license for first DVMS unit
AUS 2-10L	Archive utility server software license for second to tenth DVMS units
AUS-1L	Archive utility server software license for eleventh or greater DVMS units
3590-00502	Active Alert™ 2-camera video analytics
3590-00504	Active Alert 4-camera video analytics

OPTIONAL INTRAVUE NETWORK HEALTH AND EVENT MONITORING APPLICATION

ITNMS-016	48 analog nodes; 16 IP nodes/host
ITNMS-032	96 analog nodes; 32 IP nodes/host
ITNMS-064	192 analog nodes; 64 IP nodes/host
ITNMS-128	384 analog nodes; 128 IP nodes/host
ITNMS-256	768 analog nodes; 256 IP nodes/host
ITNMS-512	1,536 analog nodes; 512 IP nodes/host
ITNMS-ULTD	Unlimited analog nodes; 1,024 IP nodes/host

NOTICE: *Judgment as to the suitability of the products for users' purposes is solely the users' responsibility. Users should refer to the Operation manuals for cautionary statements regarding user selected options and how they might affect video quality. Users shall determine the suitability of the products for their own intended application, picture rate and picture quality. In the event users intend to use the video for evidentiary purposes in a judicial proceeding or otherwise, users should consult with their attorney regarding any particular requirements for such use.*

Pelco, Inc. Worldwide Headquarters:
3500 Pelco Way, Clovis, California 93612-5699 USA
USA & Canada Tel (800) 289-9100 • FAX (800) 289-9150
International Tel +1 (559) 292-1981 • FAX +1 (559) 348-1120
www.pelco.com