DS NVR Purpose-Built Network Solution
INTEGRAL DIGITAL SENTRY® NETWORK VIDEO RECORDER

Product Features

- Manages Video from IP Cameras and Encoders Through Ethernet
- Support for Standard IP Video Devices
- Supports Pelco IP Cameras with Sarix™ HD Technology
- Supports the Recording of H.264 Streams from IP Cameras
- Link an Unlimited Number of NVR servers
- 4-, 16-, and 32-Channel Configurations per Server
- Up to 704 x 480 (NTSC), 704 x 576 (PAL) Recording Resolution on 32 Channels Simultaneously at 15 Images per Second (ips) (NTSC), 12.5 ips (PAL)
- Up to 704 x 480 (NTSC), 704 x 576 (PAL) Recording Resolution on 16 Channels Simultaneously at 30 ips (NTSC), 25 ips (PAL)
- Digital Sentry® Video Monitoring Software for Management of All Hardware Devices from a Single Client Interface
- Remote Administration, Monitoring, and Management of Video and Audio Data
- Network Health and Event Monitoring Support
- Archive Utility
- Logical Camera Grouping
- Quick Review of up to 1 Hour of Video with Only 2 Mouse Clicks
- Detailed Reporting of System Settings and Configuration Changes
- 1-Week Graphical Display of Recorded Video
- Recording Rate Configurable per Individual Camera
- Support for DS DataPoint Integration

Digital Sentry® world-class security software provides IT-focused, scalable solutions that allow users to manage all data and hardware devices from a single client user interface. Digital Sentry network video recorder (**DS NVR**) is a purpose-built software and hardware solution that manages video from IP cameras and encoders exclusively through an Ethernet connection. Available in 4-, 16-, and 32-channel configurations with RAID and non-RAID internal and external storage options, **DS NVR** is a fully scalable solution. **DS NVR** is 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 NVR** a robust HD end-to-end solution.

Open architecture is the cornerstone of the Digital Sentry design. Users can choose specific IP cameras or encoders that fit their application. **DS NVR** supports the majority of third-party IP cameras available today and will continue to add support for new cameras as they are released to the market.
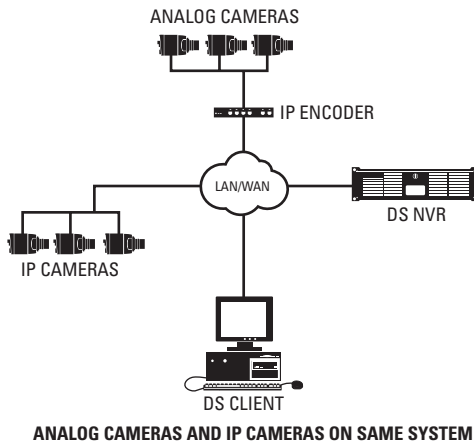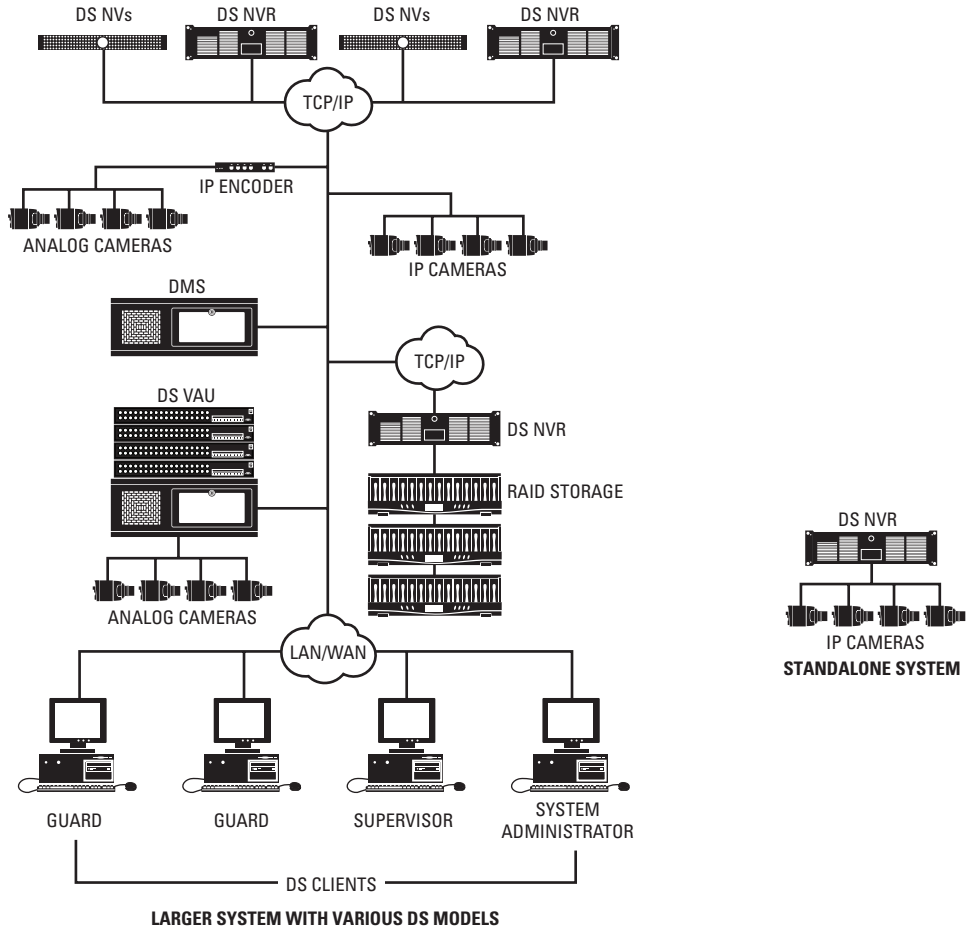
DS NVR supports the IT-focused Digital Sentry software suite that includes network health and event monitoring, video analytics, and archive utility. It seamlessly integrates with all other Digital Sentry video management systems and can be monitored by the same DS ControlPoint client application.

DS NVR offers up to 1.5 TB of internal storage, which provides enough storage to meet the requirements of most applications. Mass storage options are also available for additional storage requirements, providing flexibility and scalability to the overall solution. Each **DS NVR** contains a SCSI card as standard equipment, providing simple installation of additional mass storage units.

DS NVR contains dual Gigabit network interface cards (NIC) so that users can segment network traffic: one NIC supports heavy IP camera traffic, while the other NIC connects to client workstations for monitoring live and recorded video. **DS NVR** is designed to accommodate most security and IT requirements.

DS NVs   DS NVR   DS NVs   DS NVR

TCP/IP

IP ENCODER

ANALOG CAMERAS

IP CAMERAS

DMS

TCP/IP

DS NVR

DS VAU

RAID STORAGE

DS NVR

ANALOG CAMERAS

IP CAMERAS

STANDALONE SYSTEM

LAN/WAN

GUARD   GUARD   SUPERVISOR   SYSTEM ADMINISTRATOR

DS CLIENTS

LARGER SYSTEM WITH VARIOUS DS MODELS

ANALOG CAMERAS

IP ENCODER

LAN/WAN   DS NVR

IP CAMERAS

DS CLIENT

ANALOG CAMERAS AND IP CAMERAS ON SAME SYSTEM

IMPORTANT NOTE. PLEASE READ.
The network implementations are shown as general representations only and are not intended to show detailed network topologies. Your actual network will differ, requiring changes or perhaps additional network equipment to accommodate the systems as illustrated. Please contact your local Pelco representative to discuss your specific requirements.

TECHNICAL SPECIFICATIONS

SYSTEM

Operating System	Windows® XP Professional
User Interface	Digital Sentry Client or DS ControlPoint
Internal Storage	500 GB or 1.5 TB or 80/80 Mirror RAID
External Storage	80 GB RAID 1 for operating system and DS software; up to 14.4 TB RAID 5

VIDEO

Video Standards	NTSC/PAL	
Video Decoding	iVEX, MPEG-4, MJPEG, wavelet	
Video Resolutions	NTSC	PAL
CIF	352 x 240	352 x 288
4CIF	704 x 480	704 x 576
2CIF	704 x 240	704 x 288
HD	Up to 5 megapixels (NTSC and PAL)	
IP Camera Capacity	32	
Recording Rate per Channel	NTSC	PAL
32 Channels at 4CIF resolution	15 ips	12.5 ips
32 Channels at CIF resolution	30 ips	25 ips
16 Channels at 4CIF resolution	30 ips	25 ips
16 Channels at CIF resolution	30 ips	25 ips
4 Channels at 4CIF resolution	30 ips	25 ips
4 Channels at CIF resolution	30 ips	25 ips

AUXILIARY INTERFACES

PTZ Interface	RS-232, RS-422, RS-485
Network	10/100/1000Base-T

MECHANICAL

Connectors

USB	6 high-speed USB 2.0 ports
DB15	VGA port
DVI	Digital Video Interface
1394	1394 (not used)
RJ-45	Dual 10/100/1000 Megabit Ethernet ports
Audio Connectors	Miniature phono plug for line in (not used), line out, and microphone in (not used)

Optional I/O Connectors
Audio Levels

Input	Line-level input
Output	Line-level output

POWER

Input Voltage	100 to 240 VAC ±10%, 50/60 Hz
Power Consumption	255 W maximum

PHYSICAL

Dimension	19.5" D x 19.0" W x 3.5" H (2 RUs) (49.53 x 48.26 x 8.89 cm)
Unit Weight	29 lb (13.15 kg)
Shipping Weight	40 lb (18.14 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

MODELS

DSNVR04500	4 video inputs, 500 GB internal storage
DSNVR16500	16 video inputs, 500 GB internal storage
DSNVR161500	16 video inputs, 1500 GB internal storage
DSNVR32500	32 video inputs, 500 GB internal storage
DSNVR321500	32 video inputs, 1500 GB internal storage
DSNVR16-8080	16 video inputs, 80 GB x 80 GB RAID 1*

*No internal storage included. External RAID storage required.

NOTE: For a DS NVR system configured as a video acquisition unit (VAU) for use with a Data Management Server (DMS), add "-V" to the model number (not available with DSNVR16-8080).

SUPPLIED ACCESSORIES

USB Keyboard
USB Mouse
Power Cord
Keys
Resource Disc
Recovery Disc
Rack Hardware

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

DS NVR UPGRADES

DSNVRUP-416	Upgrade from 4 to 16 IP video channels
DSNVRUP-432	Upgrade from 4 to 32 IP video channels
DSNVRUP-1632	Upgrade from 16 to 32 IP video channels
3390-00290	DVD-RW option (factory installation)
3390-00295	DVD-RW option (field upgrade)

OPTIONAL SOFTWARE

AUSRV-SW-1L	Archive utility server software license for first DVMS unit (required)
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

OPTIONAL EXTERNAL STORAGE

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)
3530-10051-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)

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.