

Digital Vision Network

DVN 5000X Real-Time Rackmount Series (for Network Cameras)

Description

The DVN 5000X Real-Time Rackmount Series provides the highest level of performance within the Johnson Controls® Digital Vision Network (DVN) range of products. These systems, based on true client-server architecture, offer exceptional levels of video and audio recording, and transmission performance for up to 32 network cameras. The DVN 5000X Real-Time Series is designed for use with many network cameras and Johnson Controls DVN 100-NET encoders, as there is no onboard video compression. This series is also capable of processing up to 30/25 (National Television System Committee [NTSC]/Phase Alternating Line [PAL]) real-time images per second/per camera at full frame resolution (720x480/720x576 [NTSC/PAL] pixels).

The DVN 5000X Real-Time Series can simultaneously record, play, view, transmit, and archive video and audio.

Using the common DVN software platforms, the DVN 5000X Real-Time Series can be networked with any other Johnson Controls DVN, and centrally managed from a common client computer or software interface. All updates can be performed remotely via the network.

The DVN 5000X Real-Time Series provides an ideal solution for casinos, airports, military, and government applications, or any other premium digital Closed-Circuit Television (CCTV) installations requiring uncompromising levels of quality and performance.



DVN 5000X Real-Time Series

Features

- No performance degradation with unsynchronized cameras
- Recording speed up to 480/400 (16 channel) and 960/800 (32 channel) (NTSC/PAL) full-frame Frames per Second (FPS), at maximum quality and resolution (depends on remote IP camera or encoder configuration)
- True Pentaplex® functionality – real-time recording, playing, viewing, archiving, and transmitting, regardless of image content or system activity
- Fully integrated multi-vendor Pan/Tilt/Zoom (PTZ) control with minimum latency on DVN 100-NET
- Multi-sector recording speeds, quality, and times for each camera
- Support of many AXIS™ network cameras, Panasonic® network cameras, and Sony® network cameras, including various compression codecs (MPEG4, H.264, and MJPEG) and megapixel support; for current information on supported network cameras, refer to the *DVN 5000 Version 2.10 Software Release Notes (Part No. 24-10318-37)*.
- Seamless integration with DVN 100-NET encoders
- True client-server architecture with full remote-control via Transmission Control Protocol (TCP)/Internet Protocol (IP)
- Integrated web video/audio server for connections via Microsoft® Internet Explorer® Web browser
- Synchronous multi-camera playback
- Flexible user management – control access to cameras, functions and bandwidth per user
- 4RU 19" rack enclosure
- USB 2.0 support
- Full-screen for both live and playback images
- VGA video interface
- Pre-alarm recording
- Pre-motion recording
- Camera darkening detection
- Privacy patch
- Virtual zoom
- Image print
- Image/video export & authentication
- Highly flexible recording configuration
- Embedded operating system (OS) (Microsoft Windows XP® Embedded OS)
- Backwards compatibility with earlier DVN software versions (2.9 and 2.7)
- Compatible with existing networks
- Locking front access panel
- Removable system drive and data drives
- Text insertion
- Single Sign-On Authentication
- Simple Network Management Protocol (SNMP) Server functionality
- Supports up to 32 simultaneous users
- Built-in DVD-RW drive
- Support of various RAID Inc. and Promise® external storage devices. Refer to the *Digital Vision Network DVN 5000 Rackmount Series Product Bulletin (LIT-12011200)* for supported models.

Note: The following features are not supported with network cameras: motion detection, smart search, permanency detection, auto camera setup configuration, camera darkening detection, and optional image enhancement.



Advanced Search Capability



Easy to Use User Interface



Pan, Tilt, and Zoom Control



DVN 5000X Real-Time Rackmount Series (for Network Cameras) (Continued)

Environmental Conditions

Condition	Range
Operating Temperature	41°F to 95°F (5°C to 35°C)
Storage Temperature	14°F to 140°F (-10°C to 60°C)
Relative Humidity	10 to 85%, noncondensing

Technical Specifications

Features	DVN5016X	DVN5032X
Video Inputs	16	32
Video Bayonet Neill-Concelman (BNC) Loophrough	No	No
Analog Outputs	0	0
Audio Input Channels	0 ¹	0 ¹
Audio Outputs	1 ²	1 ²
Alarm Inputs (opto-isolated)	0	0
Auxiliary Outputs (relay)	0	0
Operator Interface	VGA	VGA
Internal Storage Archive	500/1,000 GB internal Non-RAID, 750/1,500/3,000 GB internal RAID 5	500/1,000 GB internal non-RAID, 1,500/3,000 GB internal RAID 5
Recording Speed	Up to 480/400 FPS ³ at 4CIF (depends on IP camera or encoder)	Up to 960/800 FPS ³ at 4CIF (depends on IP camera or encoder)
Live View	480/400 FPS ³ (depends on IP camera or encoder)	Up to 960/800 FPS ³ (depends on IP camera or encoder)
Maximum Resolution	720x480/720x576 ³	720x480/720x576 ³
FPS per Camera	1,2,3,5,6,10,15,30 / 1,2,3,4,5,6,8,12,25 ³	1,2,3,5,6,10,15,30 / 1,2,3,4,5,6,8,12,25 ³
Compression Algorithms	MPEG4 from IP camera (no onboard video compression)	MPEG4 from IP camera (no onboard video compression)
Ethernet Ports	1 Gigabit	1 Gigabit
USB Port	Yes	Yes
Power Source	120 or 240 VAC at 50-60 Hz ⁴	120 or 240 VAC at 50-60 Hz ⁴
British Thermal Units (BTU) Per Hour	Typical: 655; Maximum: 706	Typical: 655; Maximum: 706
Operating System	Windows XP Embedded	Windows XP Embedded
Power Consumption	460 W	460 W
Weight	44 lb (20 kg)	44 lb (20 kg)
Dimensions	17.1 x 21.7 x 7 in. (435 x 550 x 177 mm)	17.1 x 21.7 x 7 in. (435 x 550 x 177 mm)

1. Audio input is supported for analog cameras connected to DVN 100-NET and DVN 5000 servers (direct audio input from AXIS, Panasonic, and Sony network cameras is currently not supported). The analog audio device must be wired to a DVN 100-NET or DVN 5000 and configured as a network audio device in RemoteControl.
2. This feature is not currently supported with network cameras. Audio output can be used as a talk-back channel from SiteManager™, RemoteControl, VisionWeb.
3. NTSC/PAL
4. You must provide power to a DVN 5000 via a listed Uninterruptible Power Supply (UPS) for temporary, backup power in the event of a power failure.

Ordering Information

Part Number	Description
DVN5032XSL-015	32 inputs, 1.5 TB RAID 5, no onboard video compression, DVD drive, includes SCSI
DVN5032XSL-030	32 inputs, 3.0 TB RAID 5, no onboard video compression, DVD drive, includes SCSI
DVN5032XSN-010	32 inputs, 1.0 TB non-RAID, no onboard video compression, DVD drive
DVN5032XSK-000	32 inputs, no internal storage, no onboard video compression, DVD drive
DVN5016XSC-005	16 inputs, 500 GB Non-RAID, no onboard video compression, DVD drive
DVN5016XSC-010	16 inputs, 1.0 TB Non-RAID, no onboard video compression, DVD drive
DVN5016XSB-007	16 inputs, 750 GB RAID 5, no onboard video compression, DVD drive
DVN5016XSB-015	16 inputs, 1.5 TB RAID 5, no onboard video compression, DVD drive
DVN5016XSB-030	16 inputs, 3.0 TB RAID 5, no onboard video compression, DVD drive
DVN5016XSG-015	16 inputs, 1.5 TB RAID 5, no onboard video compression, DVD drive, includes SCSI
DVN5016XSG-030	16 inputs, 3.0 TB RAID 5, no onboard video compression, DVD drive, includes SCSI
DVN5016XSE-000	16 inputs, no internal storage, DVD drive, includes SCSI

Note: In the previous table, 1 TB = 1,000 GB = 1,000,000 MB = 1,000,000,000 Bytes

Note: The DVN can reserve up to 5% of the RAID 5 storage to compensate for the difference in drive sizes by different drive manufacturers.

DVN 5000X Real-Time Rackmount Series (for Network Cameras) (Continued)

Hardware Options

Part Number	Description
DVN-DOMECONT	USB RS232 Interface for Dome Control

Compatible Software

Part Number	Description
SiteManager ^{1,2} DVN-SW-SMGR1	Full TCP/IP Multi-server Client SiteManager software (one client license)
SiteManager ^{1,2} DVN-SW-SMGR5	Full TCP/IP Multi-server Client SiteManager software (five client licenses)
SiteManager ^{1,2} DVN-SW-SMGRUNL	Full TCP/IP Multi-server Client SiteManager software (unlimited access licenses)
RemoteControl	Full TCP/IP Client RemoteControl software (unlimited access licenses – included with purchase)
VisionWeb	Microsoft Internet Explorer Web browser TCP/IP client (included with purchase)
VisionPocket	Software for compatible Personal Digital Assistants (PDAs) (included with purchase)

1. Software user licenses are required per DVN server.
2. SiteManager is an optional software package which requires a license activation purchase and connectivity to multiple DVNs. On some prior versions, the activation process could be bypassed; however, SiteManager will no longer be possible to enable without proper authorization.

Related Documentation

Document Title	Document Number
DVN 5000 Rackmount Series Installation Guide	Part No. 24-10129-4
DVN 5000 Series RAID Management Guide	Part No. 24-10177-3
DVN 5000 Series Software Installation and Configuration Manual	Part No. 24-10248-5
DVN 5000 Series Software User Manual	Part No. 24-10248-13
VisionPocket and SiteManager Software User Manual	Part No. 24-10248-56
DVN 5000 and DVN 3000 Series Software Development Kit (SDK) Reference Manual	Part No. 24-10352-18
DVN 5000 Series Quick Startup Guide	Part No. 24-10520-14
DVN 5000 Series Storage, Shipping, and Environmental Guidelines	Part No. 24-10520-22
DVN 5000 Safety Information	Part No. 24-10598-8
DVN 5000 and DVN 100-NET Series Software Release Notes	Part No. 24-10318-37
DVN 5000 Rackmount Series System Drive Replacement Instructions	Part No. 24-10129-101
DVN 5000 Rackmount Series Product Bulletin	LIT-12011200
DVN 5000X Real-Time Rackmount Series (for Network Cameras) A&E Specification	LIT-12011409