Overview

The UltraView™ NVR 80 IP Video Storage Server and Storage 80 Video Storage Bays represent GE Security's next generation of RAID 5 storage solutions showcasing Enterprise-class performance built upon SAS storage technology and hardware-fault-tolerant designs.

Featuring enhancements to the VisioWave™/UltraView Enterprise Video Platform (EVP) family of scalable and integrated encoders, recorders and storage devices, the UltraView Series supports the new H.264-SVC compression standard. These units are fully compatible with emerging IP networks that support pure IP camera solutions as well as combined analog and IP cameras within a single solution.

The NVR 80 acts both as a video server and a storage device featuring 12TB of internal RAID 5 storage. The unit consumes video redirected from other EVP encoders/recorders as primary or redundant storage, or as a direct IP camera storage server. The unit supports up to 48 additional TBs from attached UVS Storage Bays.

The UVS Storage 80 provides extended storage via SAS connectivity for either the NVR 80 or the EVP Recorder 60 units. Two chassis types define the storage solution: 12-bay (UVS-8012) and 24-bay (UVS-8024). The NVR 80 Storage Server and the EVR 60 Recorder units support up to (4) UVS-8012's or (2) UVS-8024.

UltraView™ EVP Series

NVR 80 Storage Server (12TB)

UVS 80 Storage Bays (6-24TB)

Standard Features (all models)

- Digital video stream support for IP cameras or VisioWave/UltraView EVP encoders/recorders
- Distributed, extended and centralized storage architectures
- Serial Attached SCSI (SAS) technology
- 19" rack mountable
- RAID 5 configuration as well as RAID 0, 6, 10, 50, 60
- Dual-redundant/hot-swappable power supplies
- Hot-swappable fans (UVS-8024 features combined power supply/fan unit)
- Powerful unit health monitoring reporting
- Front accessible hot-swappable drives (1TB SATA)
    - 12 drives–NVR 8012 (2U-12 TB)
    - 12 drives–UVS 8012 (2U-12 TB)
    - 24 drives–UVS 8024 (4U-24 TB)

NVR 80 – Additional Features

- Proven 100-channel digital or 80 IP camera support
- Compact Flash based system drive for maximum reliability
- 12-bay with 1TB hot-swappable drives (SATA)
- Expandable storage to 60 video drives using UltraView UVS 80xx series storage bays (RAID)
- Works in a VisioWave Video Operating System (VOS) environment

UVS 80 – Additional Features

- Storage extension for the UltraView NVR 80 storage server and UltraView EVR 60 recorder
- Expandable Storage – up to 48 video drives may be added to NVR 80 and EVR 60 units

UVN-8012

UVS-8012

Featuring advanced Serial Attached SCSI (SAS) storage technology and an open framework, these units are well suited for enterprise security challenges. The server is seamlessly integrated via the UltraView™ EVP Video Operating System (VOS) shared by other UltraView video recorder/encoder/storage units. Multiple system architectures are supported including extended or centralized storage from UltraView EVR 10/40/60 encoder/recorders, as well as primary storage for IP cameras.

Superior reliability

Ultra-reliable connectors and cables allow the NVR 80 and Storage 80 to support up to 3 Gbps throughput. This new cable design supports cable lengths of up to 10m between devices for improved site management. Reliability is supported via RAID 5/6 storage with front-accessible hot-swappable drives, redundant hot-swappable fans and power supplies. The NVR 80 features compact flash maintained operating system for superior fault-tolerant operation.
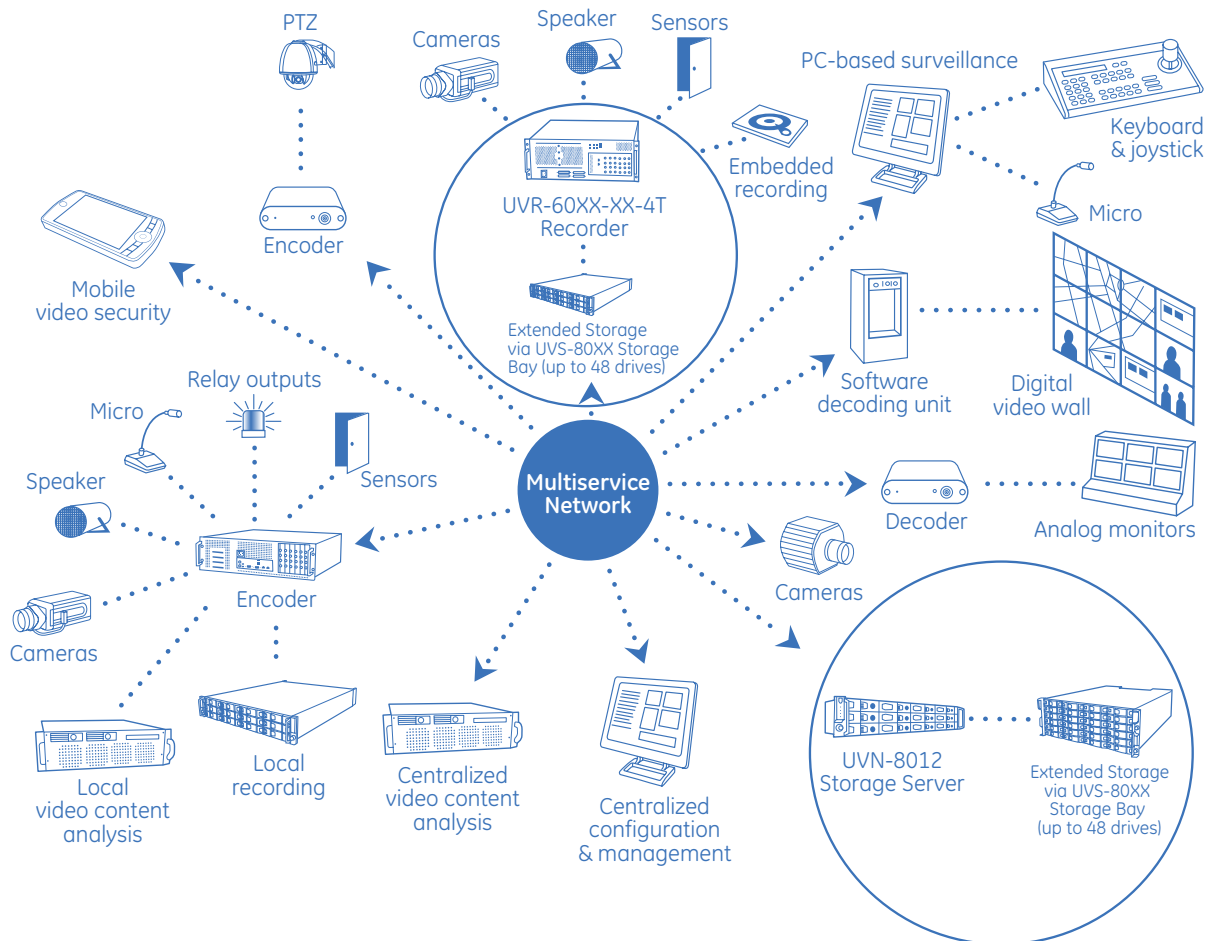
Device and drive health monitoring is available via the SDK or through GE VisioWave Security Center software that provides all video configuration, viewing and management services for the entire customer solution. Additionally, device health is available to network management applications via SNMP traps. Health monitoring includes fan temperature, drive status, RAID status and power supply voltage.

Proven performance and capacity

The UltraView™ NVR 80 and Storage 80 are fully tested as part of a complete system solution from encoder/recorder to storage device. The unit is delivered fully configured in a RAID 5 configuration. Hard drives are stress-tested with each unit as a complete solution.

With guaranteed performance including video optimization between the server, storage bays and hard drives with digital video, customers have project certainty versus using non-optimized servers and storage bays with software only solutions. Customers also save configuration and testing time as well as the cost of adding additional servers if targeted performance is not met.

UltraView™ EVP Network Configuration

PTZ
Cameras
Speaker
Sensors
PC-based surveillance
Keyboard & joystick
Micro
UVR-60XX-XX-4T Recorder
Embedded recording
Encoder
Mobile video security
Extended Storage via UVS-80XX Storage Bay (up to 48 drives)
Software decoding unit
Digital video wall
Relay outputs
Micro
Speaker
Sensors
Multiservice Network
Decoder
Analog monitors
Cameras
Encoder
Cameras
Local video content analysis
Local recording
Centralized video content analysis
Centralized configuration & management
UVN-8012 Storage Server
Extended Storage via UVS-80XX Storage Bay (up to 48 drives)

Specifications

	NVR 80 Storage Server	UVS 80 Storage Bays	
	UVN-8012-100-12T	UVS-8012	UVS-8024
Physical	The UltraView NVR 80 is built to warranty high availability through redundancy and hot-swappability of power, fans and video data drives (HDD).	The UltraView Storage 80 is built to warrant high availability through redundancy and hot-swapability of power, fans and video data drives (HDD).	
Dimensions	19.0 (W) x 3.46 (H) x 27.8 (D) inches (483 (W) x 87.9 (H) x 707 (D) mm) 2U-19" Rack Mount	19.0 (W) x 3.46 (H) x 22.72 (D) inches (483 (W) x 87.9 (H) x 577 (D) mm) 2U-19" Rack Mount	19.0 (W) x 6.88 (H) x 24.86 (D) inches (483 (W) x 174.8 (H) x 631.4 (D) mm) 4U-19" Rack Mount
Weight	24 lbs (22kg) empty; 58.9 lbs (30kg) with 12 HDDs @ 1TB each	24 lbs (9kg) empty; 80.4 lbs (30kg) with 12 HDDs @ 1TB each	24 lbs (9kg) empty; 122.7 lbs (45.8kg) with 24 HDDs @ 1TB each
Rack Mounting	19" rack 31.5-inches-deep (800mm) rack compliant with IEC297	19" rack with 28 inches depth (700mm), also fits in 31.5-inches-deep (800mm) rack compliant with IEC297	19" rack with 28 inches depth (700mm), also fits in 31.5-inches-deep (800mm) rack compliant with IEC297
Power Supply	Dual 850W power supply module (100/240V AC rated - 50/60Hz)	Dual 350W power supply module (100/240V AC rated–50/60Hz)	Combination Power and Cooling Modules (4 per chassis). Fully redundant 580W power cooling module forced-air cooling from front to back (100/240V AC rated -50/60Hz
Cooling device	Hot-swappable cooling module provides forced cooling air from back to front (10 per chassis)	Hot-swappable cooling module provides forced cooling air from back to front (2 per chassis)	Cooling provided in the Power/Cooling Module listed under the Power Supply
Power Consumption	520W	270W	450W
Temperature Operating	**Operating**: 32 to 95°F (5 to 35°C) 20; 80% RH **Storage**: 33.7 to 140°F (1 to 60°C) 20; 80% RH	**Operating**: 32 to 104°F (5 to 40°C) 20; 80% RH **Storage**: 33.7 to 140°F (1 to 60°C) 20; 80% RH	**Operating**: 32 to 95°F (5 to 35°C) 20; 80% RH **Storage**: 33.7 to 140°F (1 to 60°C) 20; 80% RH
Video Data Storage	• 12 Drives @ 1TB Enterprise Class each (12 TB) • Individually lockable/hot-swappable HDD • Slot extension to daisy-chained Ultraview Storage 80 units • Support RAID 0, 1, 5, 6, 10, 50, 60 and spare disks • Initial Configuration: 1 Volume RAID5	• 6 or 12TB configuration available • Individually lockable/hot-swappable HDD • Slot extension to daisy-chained UltraView Storage 80 • Support RAID 0, 1, 5, 10, 50, 60 and spare disks • Initial Configuration: 1 Volume RAID5	• 16 or 24TB configuration available • Individually lockable/hot-swappable HDD • Slot extension to daisy-chained UltraView Storage 80 • Support RAID 0, 1, 5, 10, 50, 60 and spare disks • Initial Configuration: 1 Volume RAID5
System	QuadCore @2.33GHz, 4GB DDR2 RAM Internal SAS RAID controller High-reliability system disk (Compact Flash)		
Networking	Dual 10/100/1000 Ethernet QoS support		
Conformity	FCC class A, European Community CE, EN55022 Class A, EN55024, EN60950, CFR47 part 15B Class A, UL60950-1 (IEC 60950-1), EN50130	FCC class A, European Community CE, EN55022 Class A, EN55024, EN60950, CFR47 part 15B Class A, UL60950-1 (IEC 60950-1), EN50130	FCC class A, European Community CE, EN55022 Class A, EN55024, EN60950, CFR47 part 15B Class A, UL60950-1 (IEC 60950-1), EN50130
Connectivity	Supports up to 4 UltraView Storage 8012 units or 2 UltraView Storage 8024 units	Up to 2 UltraView Storage 8012 units with UltraView NVR 80 or UltraView EVR 60 units	Up to 2 UltraView Storage 8012 units with UltraView NVR 80 or UltraView EVR 60 units
System Monitoring	Remote alarm notification through SNMP, Audible and visual notification for system status, embedded monitoring: FAN, HDD, temperature, voltage, Running on the Visio-Wave™ Operating System (VOS) Requires VOS 4.2.0 software release or higher	Embedded monitoring of FAN, HDD, Temperature, Voltage and Remote Alarm Notification through SES (embedded monitoring) and remote alarm notification through SNMP and directly via VOS through the UltraView NVR 80 and EVR 60 units	Embedded monitoring of FAN, HDD, Temperature, Voltage and Remote Alarm Notification through SES (embedded monitoring) and remote alarm notification through SNMP and directly via VOS through the UltraView NVR 80 and EVR 60 units

Integration Matrix	UltraView™ NVR 80 Storage Server
VSC 4.2 and above	X
VOS SDK 4.2 and above	X
GE Nav v2	
Facility Commander™ v.2.3 or higher	X
Facility Commander Wnx v.7.6 or higher	X
EVR 60 Recorder	X
EVR 40 Recorder	
Direct-Attached VisioWave™ VRU 8/12/16 Units	

IP Camera Support Matrix*	UltraView NVR 80 Storage Server
TruVision™ IP Dome (CamPlus™ IP)	X
UltraView™ IP (CamPlus 2 IP)	X
GE Legend™ IP	X
GE UltraView EVP Series Encoder 10 with analog camera	X
Axis (various models)	X
Panasonic (various models)	X
ACTi (various models)	X

Storage Support Matrix*	UltraView UVS 80 Storage Bays
UVN 80 Storage Server (direct-attached)	X
GE Nav v2	
EVR 60 Recorder (direct-attached)	X
EVR 40 Recorder (direct-attached)	

*New IP makes and models are continually being added. Please check with your GE sales
  representative for the current list of supported products.

Ordering Information

NVR 80 Storage Server	
UVN-8012-100-12T	UltraView Storage Server, 12-Bay SAS RAID, 12 TB Storage, 2U, up to 100 IP video streams
UVN-SP8012-1TB-DT	Spare Part-UltraView UVN-8012: 1TB Drive Tray with 1TB SAS Drive
UVN-SP80XX-RAIL-2U	UltraView NVR/NVS Rail Kit 2U: UVN-8012 and UVS-8012 Series Devices

UVS 80 Storage Bays	
UVS-8012-6T	UltraView Storage Bay, 12-Bay SAS, 6 TB Storage, 2U, extends storage of UVN-80xx and UVR-60xx series devices
UVS-8012-12T	UltraView Storage Bay, 12-Bay SAS, 12 TB Storage, 2U, extends storage of UVN-80xx and UVR-60xx series devices
UVS-8024-16T	UltraView Storage Bay, 24-Bay SAS, 16 TB Storage, 3U, extends storage of UVN-80xx and UVR-60xx series devices
UVS-8024-24T	UltraView Storage Bay, 24-Bay SAS, 24 TB Storage, 3U, extends storage of UVN-80xx and UVR-60xx series devices
UVN-SP8012-1TB-DT	Spare Part-UltraView UVN-8012: 1TB Drive Tray with 1TB SAS Drive
UVS-SP80XX-1TB-DT	Spare Part-UltraView UVS-80XX: 1TB Drive Tray with 1TB SAS Drive
UVN-SP80XX-RAIL-2U	UltraView NVR/NVS Rail Kit 2U: UVN-8012 and UVS-8012 Series Devices
UVN-SP80XX-RAIL-4U	UltraView NVS Rail Kit 4U: UVS-8024 Series Devices

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