

# NVR7812/7816



- Server-storage hybrid design for best cost-performance ratio
- Cableless design with hot swappable redundant component for easy maintenance
- Built-in RAID function for data protection
- Built-in SAS expansion for JBODs with up to 316 HDDs
- Intuitive set-up page for hassle-free installation

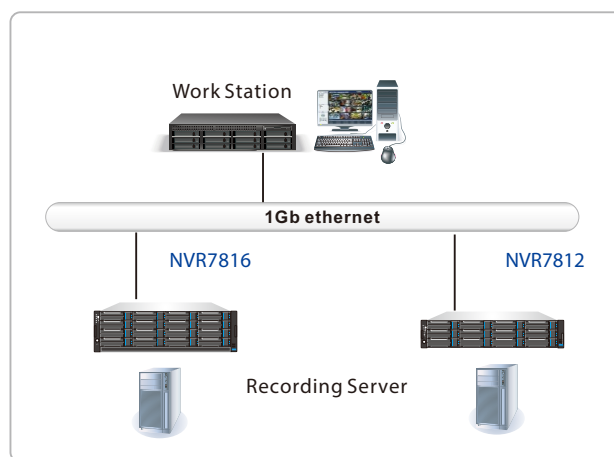
## Milestone VMS

- Xprotect® Corporate  
Advanced surveillance solution in large-scale and high-security projects, such as city surveillance and airport
- XProtect® Enterprise  
Medium to large surveillance solution for medium-large scale areas, such as train stations and power plants

## Genetec VMS

- Omnicast™ VMS  
Provides organizations of all sizes the ability to deploy a surveillance system that addresses their unique video security needs

## Solution Topology



## Milestone Performance Test

### Xprotect Corporate - Continuous Recording

Test Scenario 1 (NVR only)	NVR Model	Processors	Stream Profile (#of cameras, compression %)	Live Video Database Read Latency(millisceonds)	Individual Video Stream Size(Mbps)	Maximum Disk I/O (MBps)
Benchmark	NVR7812 NVR7816	i3-4330	60 camera, 30%	2	10.17	120.64
		E3-1225	60 camera, 30%	2	10.17	375.92
		E3-1275	60 camera, 30%	9	10.65	119.98
Maximum	NVR7812 NVR7816	i3-4330	110 camera, 60%	4	13.94	293.71
		E3-1225	145 camera, 60%	7	9.91	267.61
		E3-1275	150 camera, 60%	10	14.41	498.1

### Xprotect Corporate - Video Motion Detection - RAID5 - Archiving

Test Scenario 2 (NVR +JBODs)	NVR Model	Processors	Stream Profile (#of cameras, compression %, Motion detection %)	Live Video Database Read Latency(millisceonds)	Individual Video Stream Size(Mbps)	Maximum Disk I/O (MBps)
Benchmark	NVR7812 NVR7816	i3-4330	30 camera, 30%, 30%	3	10.06	493.41
		E3-1225	30 camera, 30%, 30%	2	5.2	486.79
		E3-1275	30 camera, 30%, 30%	1	10.23	557.91
Maximum	NVR7812 NVR7816	i3-4330	70 camera, 60%, 30%	1	5.09	445.29
		E3-1225	110 camera, 60%, 30%	2	5.07	631.17
		E3-1275	140 camera, 60%, 30%	2	5.18	516.83

## Genetec Performance Test

### Continuous Recording

Test Scenario 1	NVR Model	Processors	Stream Profile (#of cameras, resolution)	Live Video Database Read Latency(millisceonds)	Individual Video Stream Size(Mbps)	Maximum Disk I/O (MBps)
Maximum	NVR7816	i3-4330	300 camera, 1.3MP	-	1	-
		E3-1225	300 camera, 1.3MP	-	1	-
		E3-1275	300 camera, 1.3MP	-	1	-
		i3-4330	60 camera, 1.3MP	-	5	-
		E3-1225	60 camera, 1.3MP	-	5	-
		E3-1275	60 camera, 1.3MP	-	5	-

\* All Specification are subject to change without notice.

\* All brand names and registered trademarks are the property of their respective owners.

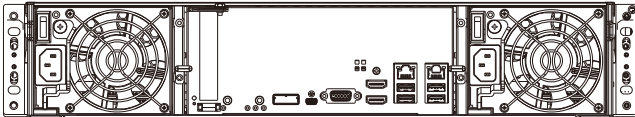
# NVR7812/7816

## Motion Detection Recording

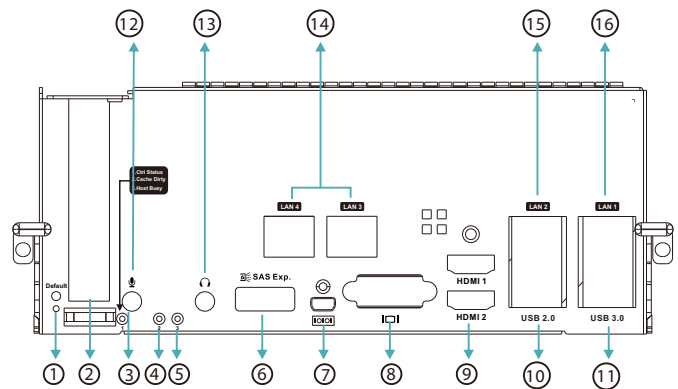
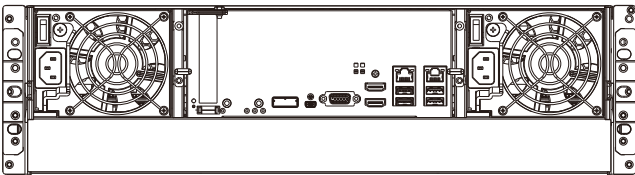
Test Scenario 2	NVR Model	Processors	Stream Profile (#of cameras, resolution)	Live Video Database Read Latency(millisecons)	Individual Video Stream Size(Mbps)	Maximum Disk I/O (MBps)
Maximum	NVR7816	i3-4330	110 camera, 1.3MP	-	1	-
		E3-1225	150 camera, 1.3MP	-	1	-
		E3-1275	190 camera, 1.3MP	-	1	-
		i3-4330	45 camera, 1.3MP	-	5	-
		E3-1225	60 camera, 1.3MP	-	5	-
		E3-1275	60 camera, 1.3MP	-	5	-

## NVR7800 Series Rear-view

NVR7812

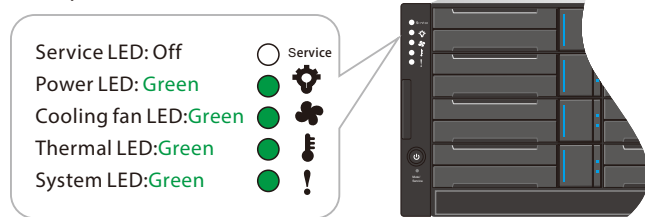


NVR7816



1	Reset to default button and LED	9	HDMI port
2	PCI_E expansion slot	10	USB 2.0 port
3	Controller status LED	11	USB 3.0 port
4	Catche Dirty LED	12	3.5mm microphone jack
5	Host Busy LED	13	3.5mm headphone jack
6	6Gb/s SAS expansion port	14	1 Gb/s Ethernet(optional)
7	mini USB COM port	15	1 Gb/s Ethernet(Wake in LAN)
8	D-Sub VGA port	16	1 Gb/s Ethernet

### Front panel LEDs:



## Specification

Form factor	2U 12-bay/3U 16-bay	Disk support	<ul style="list-style-type: none"> <li>3.5" 7,200 RPM NL-SAS HDD</li> <li>3.5" 7,200 RPM SATA HDD</li> </ul>
Controller architecture	Single controller	Max. disk support number	<ul style="list-style-type: none"> <li>NVR7812: 312 disks (1 x NVR7812 + 5 x 4U 60-bay JBOD) / 180 disks (1 x NVR7812 + 14 x 2U 12-bay JBOD)</li> <li>NVR7816: 316 disk (1 x NVR7816 + 5 x 4U 60-bay JBOD) / 240 disk (1 x NVR7816 + 14 x 3U 16-bay JBOD)</li> </ul>
System drive	Install two SATA HDDs with RAID1	Compatible Operating System	<ul style="list-style-type: none"> <li>Windows 10 Enterprise, 64-bit</li> <li>Windows 7 Professional SP1, 64-bit</li> <li>Windows Server 2012, 64-bit</li> <li>Windows 7 Ultimate, 64-bit</li> </ul>
CPU	<ul style="list-style-type: none"> <li>Default: Intel Core i3-4330, dual-core 3.5G</li> <li>Up gradable: Intel Xeon E3-1225, quad-core 3.2G</li> <li>Intel Xeon E3-1275, quad-core 3.5G</li> </ul>	Installation	OS can be installed in backend 2.5" SATA system drive
DIMM slot	DDR3 slot x 4	RAID Functionality	RAID 0, 1, 5, 6, 10, 50, 60, 1+Spare, 5+Spare, 6+Spare
Memory capacity	Supports up to 32GB (4 x 8GB) with ECC / non ECC	PSU	Dual Redundant PSU (460 watts)
Rear I/O ports	<ul style="list-style-type: none"> <li>Gigabit Ethernet x 4</li> <li>USB 2.0 x 2</li> <li>USB 3.0 x 2</li> <li>VGA x 1</li> <li>HDMI x 2</li> <li>Mic. in port x 1</li> <li>Speaker out port x 1</li> </ul>	Enclosure Dimension	<ul style="list-style-type: none"> <li>2U 19-inch rackmount with chassis ears: (H)88.00mm x (W)447.40mm x (L)524.41mm</li> <li>3U 19-inch rackmount with chassis ears: (H)130.00mm x (W)447.40mm x 524.20mm</li> </ul>
Service port	Service port x 1 (mini USB connector - RS 232 interface)		
PCI-E Gen3 slot	<ul style="list-style-type: none"> <li>PCI-E 3.0 x 8 slot x 1</li> <li>Support 10Gbe x2 (SFP+&amp;RJ-45) or 1GbE x 4</li> </ul>		
Drive interface	6Gb/s SAS		
JBOD expansion	6Gb/s SAS wide port x 1		