

SONY®



# Network Surveillance Server

NSR-1200/1100/1050H

[www.sony.com/security](http://www.sony.com/security)

Preliminary

IPELA™

# Hybrid, Open-Platform, Easy-To-Operate Network Surveillance Server

The demand for surveillance systems is growing, and the adoption and use of IP as a transport mechanism for video continues to increase. Sony recognized this trend early on, and has been focused on developing products and solutions aligned with this trend. Sony is pleased to announce the introduction of the NSR Series of recording servers.

The key concepts of the NSR-1000 Series are a “hybrid” capability – these recording servers support both legacy analog and current IP cameras – an open-platform design, and ease of setup and operation.

With the NSR-1000 Series, you can open the door to a world of possibilities in video surveillance.

## Comparison

	NSR-1200	NSR-1100	NSR-1050H
Internal Storage	2 TB	1TB	0.5TB
Max. Number of IP/Analog Cameras Supported*1	64 Units	32 Units	20 Units
Max. Number of Analog Camera Connections	Option (16 Inputs)	Option (16 Inputs)	Standard (16 Inputs)
Max. Frame Rate for Recording*2	480 fps	240 fps	120 fps
HDMI Outputs	x 2	x 2	x 2
RAID	RAID 5	RAID 0	-

\*1 Total of IP and analog cameras. \*2 Without local displays.

## Why Choose the NSR-1000 Series?

### Hybrid System

#### Easy migration from analog to IP camera systems

Up to 16 analog cameras can be connected to the NSR-1000 Series (NSR-1050H: directly connected; NSR-1100/1200: connected using the NSBK-A16 Analog Encoder Kit). You can simply add network cameras, including megapixel cameras, while maintaining your analog cameras.

#### Easy to migration to large-screen HDTV display systems

The NSR-1000 Series has two analog RGB and two HDMI™ monitor output connectors on the rear panel. You can use two out of the four outputs simultaneously in any combination to meet your system requirements.

#### Easy to migration into HD camera systems

To answer to the growing demands for HD (high definition) network cameras, the NSR-1000 Series plans to support this capability in the near future.

### Open Platform

#### Freedom to select from a wide range of cameras

The NSR-1000 Series can be used with Sony IP cameras, and IP cameras from other manufacturers as well.

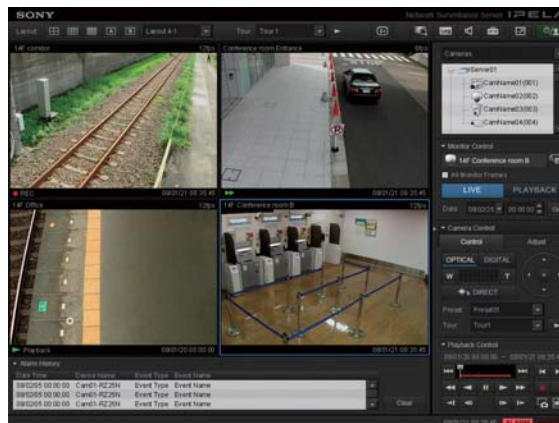
### Quick Setup & Easy Operation

#### Quick setup

With the set-up wizard, you can set up the system in a simple manner. The setup wizard detects Sony IP cameras in the system, which drastically reduces the time required for setup. With Sony's IP cameras, the NSR-1000 Series detects the cameras instantly, which drastically reduces the time required for the system installation. Images from cameras are assigned to a Monitor Layout automatically so that you can start monitoring instantly.

#### Intuitive graphical user interface

You can search, preview, and play back the recorded video with an intuitive user interface.



# FEATURES

## High Reliability

### RAID drives

The NSR-1200 employs RAID 5 to save the system in the event of an HDD failure.

### UPS

The NSR-1000 Series can be used with Uninterruptible Power Supply (UPS) equipment via the RS-232C port to protect the data in the event of power failure or interruption.

## High Picture Quality

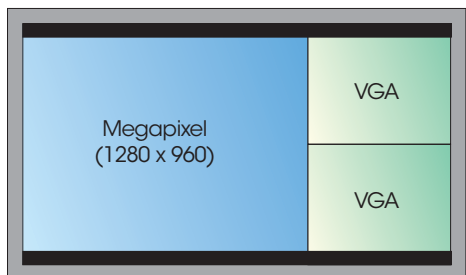
### High frame rate display

The video refresh rate of the NSR-1000 series provides for much clearer and smoother images even with a multi-screen display showing 16 cameras. With the NSR-1200 connected to 16 cameras, the movement of the video can be viewed through a monitor much more clearly and smoothly.

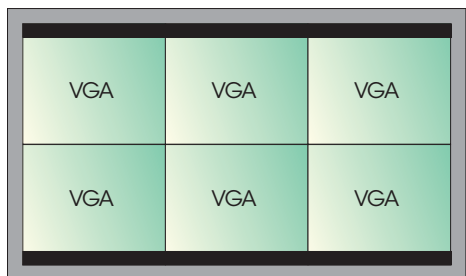
### HDMI outputs for "Full HD" displays

You can view and monitor video via the HDMI interface with Full HD (1920 x 1080) displays. If you use megapixel cameras, you can view the full resolution image with such equipment. What's more, you can set a 6-screen display layout and still view VGA video in full resolution.

### Application of Full HD Display



Megapixel x 1, VGA x 2



VGA x 6

## With Sony IP Cameras

### MPEG4/JPEG dual stream

Connected with the SNC-RX Series, SNC-DS10, SNC-DM110, and later models from Sony, the NSR-1000 can accept both JPEG and MPEG4 from the cameras at the same time. With a limited storage capacity, for example, you can monitor live video via JPEG at frame rates as high as 30 fps, and record video via MPEG4 at frame rates as low as 5 fps.

### DEPA

Both the NSR and IMZ Series incorporate DEPA™ – Sony's Distributed Enhanced Processing Architecture. Used in conjunction with DEPA-enabled network cameras from Sony (SNC-RX Series, SNC-RZ50, SNC-CS50, and later models), DEPA technology helps identify critical events more easily, and provides a streamlined workflow for your video security operations.

## Expandability and Flexibility

### Additional storage of 2 TB x 7

The NSR-1200/1100/1050H has an internal storage of up to 2 TB/1 TB/0.5 TB respectively. Each can be connected with up to seven units of the NSRE-S200 (2 TB Hard Disk Storage Device). With the NSR-1200 in RAID 5 configuration and the seven units of the NSRE-S200, the maximum storage capacity will be 11 TB (approx.) in total.

### Remote viewing by controller software

If you install the bundled Controller Software to a personal computer in a remote location, you can supervise NSR-1000 Series recording servers simultaneously in various locations, with flexibility in selecting and viewing live and recorded images.

### IMZ-NS100 Series

In the same series of software solution, Sony also provides the IMZ-NS101/ NS104/ NS109/NS116/ NS132 Intelligent Monitoring Software. This can be installed on your own Microsoft Windows® server to monitor and control 1/4/9/16/32 network cameras, respectively. It features the same functionality and graphical user interface as the NSR-1000 Series. The supplied Controller Software can be used for the multiple NSR-1000 Series and IMZ-NS100 Series.

### Flexible user management

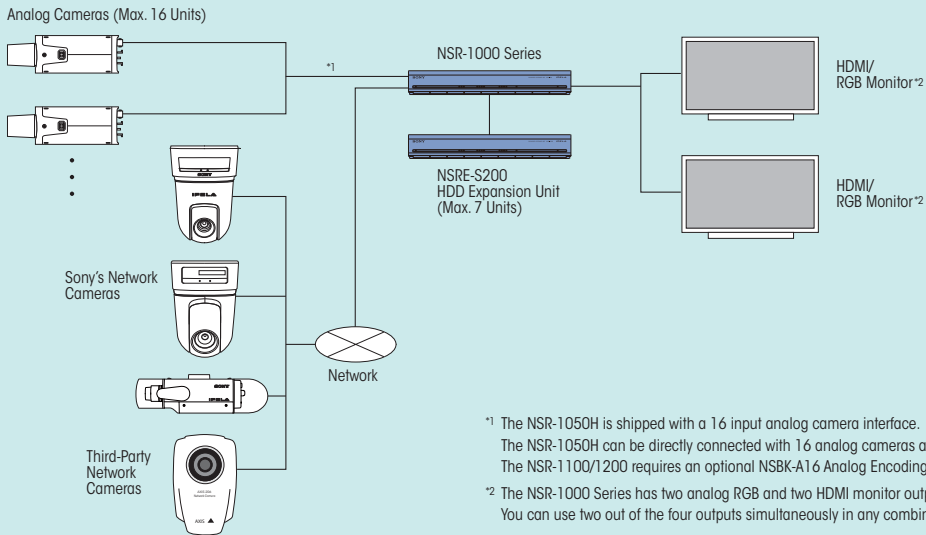
All access to the NSR-1000 Series is managed by user authorization, which is set by the system administrator. The administrator can simply provide a user with the prepared five levels of operational permission, or the administrator can give a user different permission levels for different accessible cameras/servers.

## Other Features

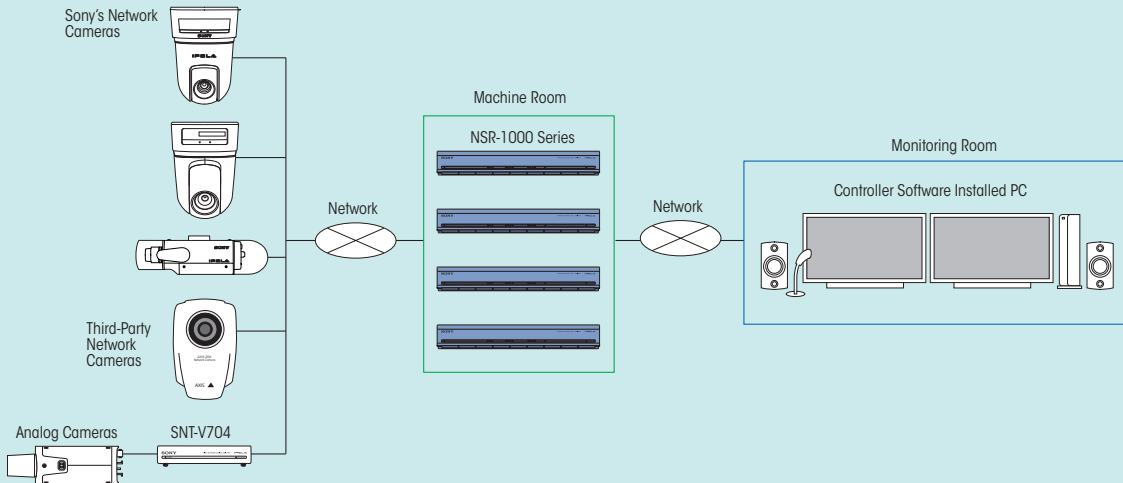
- Playback While Monitoring Live Images
- Camera PTZ Control
- Light Funnel Control
- Multiple Hot-Spot Monitoring
- Manual, Scheduled, Alarm/Event, and Pre-alarm Recording
- Privacy Zone Masking
- Audio Recording, Monitoring, and Playback
- File Export to CD-R, DVD-R, and USB Flash Memory

# System Examples

## Stand Alone Configuration



## Client-Server Configuration



## Optional Products



**NSBK-A16**  
Analog Encoding Kit



**NSRE-S200**  
HDD Expansion Unit



**SNT-V704**  
Video Network Station



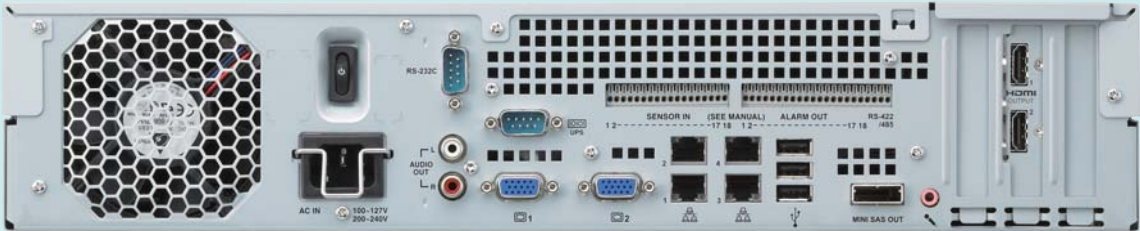
**NSR-RM1**  
Rack Mount Kit

# Connectors

Front Panel (Cover Open)  
NSR-1200/1100/1050H



Rear Panel  
NSR-1200/1100



Rear Panel  
NSR-1050H



Rear Panel  
NSRE-S200



# SPECIFICATIONS

	NSR-1200		NSR-1100	NSR-1050H
<b>Video/Recording</b>				
Number of Cameras Supported (IP/Analog Total)	Max. 64		Max. 32	Max. 20
Analog Camera Input	Option (NSBK-A16)			16ch Video Input/ 4ch Audio Input (Supplied Cable)
Video Compression (IP-Camera)	MPEG-4 or JPEG			
Video Compression (Analog-Camera)	-			MPEG-4
Maximum Recording Rate	480 fps		240 fps	120 fps
Hard Disk Drives (Physical Capacity)	2000 GB (500 GB x4)		1000 GB (500 GB x2)	500 GB (500 GB x1)
Hard Disk Drives (RAID Level)	RAID 5		RAID 0	-
Hard Disk Drives (Recording Capacity)	1366 GB		886 GB	443 GB
Expansion Storage	Supports NSRE-S200 (2000 GB) (Max. 7 Units)			
<b>Video Interface</b>				
Monitor Out #1 (HDMI or Analog)	HDMI Output	HDMI (A-type) x1		
	Analog RGB Output	D-sub 15pin x1 (Front) or D-sub 15pin x1 (Rear) *2		
Monitor Out #2 (HDMI or Analog)	HDMI Output	HDMI (A-type) x1		
	Analog RGB Output	D-sub 15pin x1		
<b>Audio Interface</b>				
Line Out	RCA-pin, L/R x1 stereo pair			
<b>Sensor/Alarm</b>				
Sensor In	8-channel photo-coupler (DC3.3-24 V)			
Alarm Out	8-channel relay (Max. 24 V 1 A)			
<b>Other Interfaces</b>				
Ethernet *1	1000Base-T/100Base-TX/10Base-T x 4 (Auto switching)			
USB 2.0	x3 (Front), x3 (Rear)			
Serial Interface (for UPS)	RS-232C x1			
Serial Interface (for Analog Camera Control)	RS-232C x1, RS-422/485 x1 (Either one to be selected)			
SAS 1.1 (Serial Attached SCSI)	SFF-8088 type x1			
<b>General</b>				
Dimensions (W x H x D)	17 x 3 1/2 x 16 1/2 inches (430 mm x 87 mm x 417 mm) (exclusive projections)			
Weight	Approx. 29 lb 12 oz (13.5 kg)	Approx. 26 lb 7 oz (12 kg)	Approx. 25 lb 6 oz (11.5 kg)	
Power Requirements	100 V to 127 V/200 V to 240 V AC (50/60 Hz)			
Power Consumption	265 W (typical)	185 W (typical)	175 W (typical)	
Operating Temperature	41 to 104 °F (5 to 40 °C)			
Operating Humidity	10 to 80% (Max. wet-bulb temperature 30 °C, non-condensing)			
Supplied Accessories	Analog Camera Cable x1 (NSR-1050H Only), Front panel key x2, Rubber Feet x4, Recovery CD x1, Manual/Tool/Source Codes CD x1			

\*1 Port #1 to #3 can be used as ordinary LAN ports. Port #4 cannot be used alone. Channel Bond is supported by #3 and #4.

\*2 The D-sub 15-pin (Front) and D-sub 15-pin (Rear) Connectors cannot be used simultaneously.

NSRE-S200	
<b>Storage Capacity</b>	
Hard Disk Drives (Physical Capacity)	2000 GB (500 GB x4)
Hard Disk Drives (RAID Level)	RAID 5
Hard Disk Drives (Recording Capacity)	1396 GB
<b>Interfaces</b>	
SAS (Serial Attached SCSI) 1.1 Input	SFF-8088 type x1
SAS (Serial Attached SCSI) 1.1 Output	SFF-8088 type x2
Ethernet (For Maintenance)	100Base-TX/10Base-T auto x1
Serial Interface (For Maintenance)	RS-232C x1
<b>General</b>	
Dimensions (W x H x D)	17 x 3 1/2 x 16 1/2 inches (430 mm x 87 mm x 417 mm) (exclusive projections)
Weight	Approx. 26 lb 7 oz (12 kg)
Power Requirements	100 V to 127 V/200 V to 240 V, AC (50/60 Hz)
Power Consumption	80 W (typical)
Operating Temperature	41 to 104 °F (5 to 40 °C)
Operating Humidity	10 to 80% (Max. wet-bulb temperature 30 °C non-condensing)
<b>Supplied Accessories</b>	
Front panel key x2, Rubber foot x4, CD x1	

NSBK-A16	
<b>Encoding Card</b>	
Number of Analog Cameras Supported	Max. 16
Number of Audio Inputs	Max. 4 inputs
Video Compression	MPEG-4
Input Video Format	NTSC or PAL
Weight	Approx. 2.5 oz (72 g)
Input Connector	DVH Connector x1
Host Interface	PCI
<b>Analog Camera Cable (Supplied)</b>	
Input Connector (Video)	BNC x16
Input Connector (Audio)	RCA x4
Output Connector	DVH Connector x1
Weight	Approx. 8.3 oz (235g)
Length	11 7/8 inches (300 mm)
<b>General</b>	
Operating Temperature	41 to 104 °F (5 to 40 °C)
Operating Humidity	10 to 80% (Max. wet-bulb temperature 30 °C, non-condensing)
<b>Supplied Accessories</b>	
Analog Camera Cable x1, CD x1	

**SONY**

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