

XIS-3420/XIS-31HCX

XIS-3310/XIS-31NT

Wide Area Monitoring Solutions

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XIS

Wide Area Monitoring

Monitor Your Grounds, Borders, and Key Facilities with a Sony Wide Area Monitoring (WAM) Solution - Serves as an Early Warning System and Increases Your Sense of Security

Today's changing world is creating challenges for governments and large facility owners to protect their investments. We can never be too careful when it comes to protecting our property and when our property is of high value, it is a good idea to monitor for potentially threatening activities 24 hours/7 weeks. In response to the challenges we face during these changing times, Sony has been developing systems and solutions that can assist in protecting your precious assets - Sony is on your side!

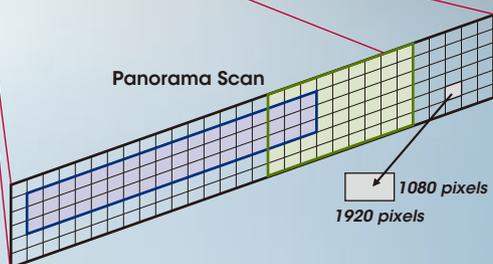
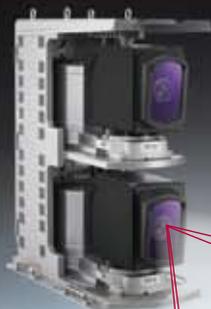
Typical surveillance systems might not be adequate for monitoring large premises with mission-critical systems, nor are they capable of monitoring wide perimeters and borders. And that is precisely why Sony has introduced a highly effective WAM solution, which not only efficiently monitors wide areas, but is capable of both day and night operation. At the heart of the Sony WAM solution is the XI's 3000 Series of Intelligent Monitoring Systems. These long-range cameras can cover an extremely wide area from a single location and can transmit image data over a TCP/IP network to be stored on a server.

For wide area monitoring on the go, the XI's mobile deployment system is ideal. These mobile units can be set up anywhere there is flat terrain to monitor long-range wide areas.

And to cover any specific high-threat points and blind areas, and to monitor inside buildings, Sony PTZ (Pan/Tilt/Zoom) cameras and fixed network cameras are ideal. All of these systems can be monitored from a single location on site or a remote location using sophisticated Sony monitoring software.

Regardless of the size of your facility or the vastness of the area you would like to monitor, Sony has a solution for you. Because these systems are designed to be flexible and because they transmit information over TCP/IP networks, your system can be expanded to meet future requirements. For wide area monitoring in locations such as power plants, dams coastal waterways, oil pipelines airports, seaports, and borders, the Sony WAM solution is perhaps the most comprehensive monitoring solution on the market today.

XI's



(XIS-31HCX)

Capture Angle		Number of Image Blocks	
(H)	(V)	(H)	(V)
269°	32°	24	5
224°	32°	20	5
157°	25°	14	4
78°	32°	7	5

XI's systems efficiently captures image of extremely wide areas from a single location. The system can analyze the changes or movement in the large panoramic image by using sophisticated detection algorithm, so that the operator can quickly check the detail situation and take appropriate actions.



Sony Wide Area Monitoring Benefits

XIS-3420
HD System

XIS-31HCX
HD Camera

XIS-3310
Thermal System

XIS-31NT
Thermal Camera

Long-Range, Wide & Live

● Long-Range, Wide Area Image Capturing

The Sony high-definition XIS-3420 (HD system) and XIS-3310 (thermal system) can capture high-quality, wide area panoramic images over distances of several miles*1.

● High-quality Images/24-hour Operation

The Sony XIS-3420 day-use camera adopts a 3CCD HD imager to produce high-quality images. And the day-and-night-use XIS-3310 employs outstanding thermal imagers capable of generating high-quality thermal video images even in 0 lx lighting conditions. These images can be overlaid on a daytime color image for more effective monitoring. This combination, along with the system's continuous recording capability, allows for 24/7 operation, 365 days a year.

● Panorama & Live

XIS-3000 Series cameras capture a wide area by scanning the area with one camera while pinpointing areas within that range using a live camera. This allows for comprehensive coverage of a much greater area than conventional cameras.

● Difference Detection

The XIS-3000 Series features an ingenious Difference Detection function that can detect movement as small as a human being at a distance half mile*1 from the camera. When movement is detected, the corresponding area is highlighted on the monitor to alert the operator, and an alarm can be triggered.

● Mobile Monitoring

If requirements call for monitoring from several different locations, the Mobile deployment system is ideal. This system can be set up anywhere there is flat terrain.

● Local and Remote Monitoring Over IP Networks

All cameras in a Sony WAM solution can be monitored from a single location on-site or remotely.

● High-Reliability and Durability

Sony WAM solutions have been designed to be reliable and durable to meet user requirements.

● Weatherproof (IP66)

Sony XI's cameras are designed for outdoor use. All cameras are IP66 rated, as defined by the IEC60529 standard, which means that the systems are resistant to jet sprays and dustingress.

● Day/Night Operation

Sony network cameras offer a Day/Night function that allows them to operate in very low lighting conditions, and even in 0 lx conditions when used with IR illuminators.

● SDK (Software Development Kit)

To protect a wide area of property, system integration with radar, maps, and other cameras is inevitably required. The XIS Series includes an SDK for developers to interface the system with third-party vendor products.

● Indoor/Outdoor Use Full-Featured Cameras

Sony's network camera, the SNC Series is designed for both indoor and outdoor use for pinpoint coverage. These feature-rich cameras offer a multitude of functions for conventional surveillance monitoring.

Integration

Radar
Maps
Other cameras

Pinpoint Coverage

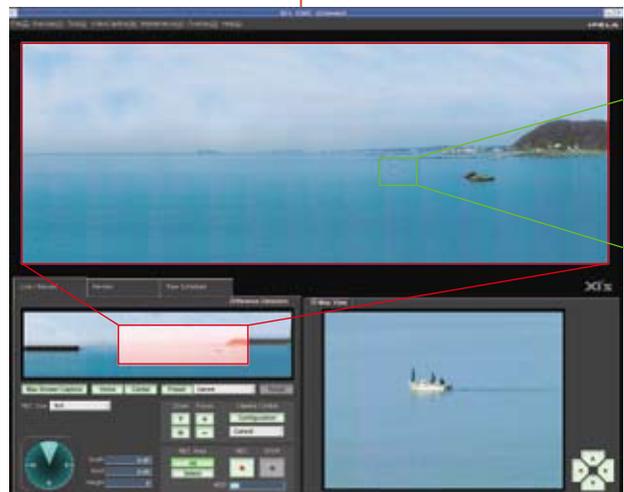
Network Cameras

*1: Ranges can vary depending on weather conditions.

The Sony Wide Area Monitoring Solution - IP



■ Local (On-site) Monitoring Room



■ Difference Detection

Different Detection is an ingenious function of the XI's Series systems. When movement is detected, Passive Video Radar compares the current frame with the previous frame, and alerts the operator by highlighting the specific area of movement.

Video Monitoring



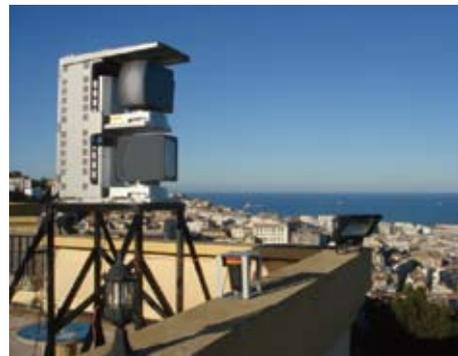
IP Mini-Dome Camera



IP PTZ Camera



■ Permanent Installation



■ Mobile Deployment



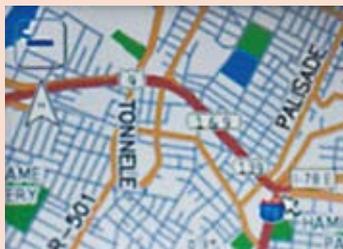
■ Live (Spot) Viewing

XI's live cameras capture objects, including people, at a distance of several kilometers. Live Viewing software contains various digital processes such as Motion Detection, Shimmer Cancel, Enhancement, and Distance Measurement, to name just a few.

■ Link with Other Devices



Radar



Map

■ Link with Other Cameras

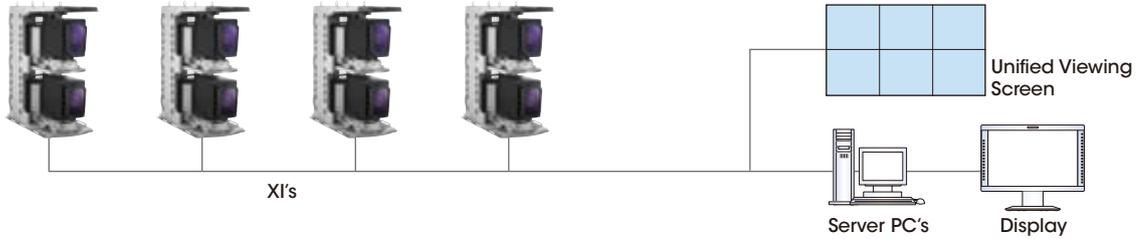


Application Examples



■ Airport

- Fence (Perimeter) Surveillance
- Coast Surveillance
- Critical Area Protection
- FOD (Foreign Object Debris) Detection



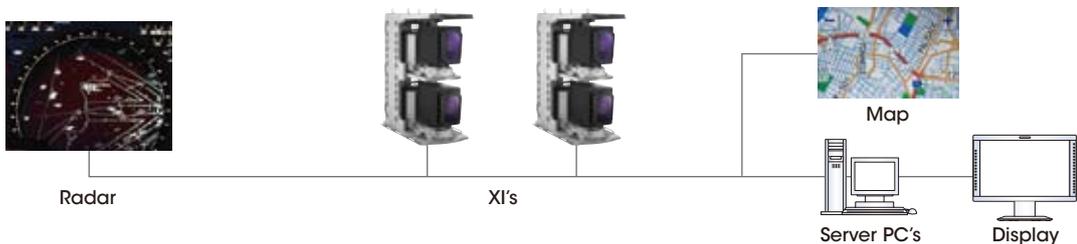
■ Port/Coast Guard

- Vessel Traffic Control (Monitoring)
- Accident Recording
- Coast Surveillance
- Detection of Swimmer



■ Defense/Border

- Intruder Base Protection
- Coast Surveillance
- Border Protection



Features

XI's Unique Features for Accurate Monitoring

Image Enhancer

The 'Image Enhancer' function available with the live camera is ideal for use in foggy or smoggy weather conditions. It enhances the sharpness of the monitored image to provide much more detail than when used without the function.



Image Enhancer Off



Image Enhancer On

Shimmer Reduction

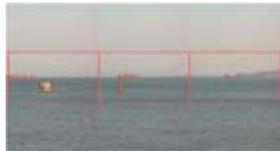
'Shimmer Reduction' minimizes shimmer when the live camera is zoomed in on small or distant objects to produce clear images with minimal noise.

'Object Extraction' within Panorama Image

When monitoring images along coastlines, it can be difficult to differentiate between waves and other moving objects. The 'Object Extraction' function can be used to distinguish objects in the water from waves.



Object Extraction Off



Object Extraction On

Distance Measurement

XI's system measures the distance from camera location to the point of object.

Other Convenient Features

Weatherproof (IP66)

Both the HD cameras and thermal cameras in the XI's system are IP66-rated as defined by the IEC 60529 standard. This means that the cameras are resistant to jet sprays and dust ingress.

Easy Relocation and Expansion

Because the XI's Series is configured over standard IP networks, relocation and expansion of the system is very easy.

Integrated Support of Up to Eight IP Cameras to Minimize Blind Spots

By integrating Sony IP cameras with the XI's system, blind spots can be minimized.

"Auto Cruise" Function

Up to 64 presets of PTZ position, focus, and duration can be set so that the live camera "tours" the scene. Of course, the camera can be manually overridden.

Pan Tilt Assist

With Pan Tilt Assist mode, when Panorama camera detect intruders, the live camera automatically move to the point, zoom and alert by the beep. Operator does not need any system operation.

Optional Features

API (Application Programming Interface) for User Specific Applications

The system can be integrated with third-party equipment and subsystems such as Geographic Maps, Radar Systems, and Global Positioning Systems, are possible.

Specifications

	XIS-3420 HD Camera System	XIS-3310 Thermal Camera System
	<p>XIS-RK502X*</p> <p>XIS-31HCX</p> <p>*Option</p>	<p>XIS-RK502*</p> <p>XIS-31NT</p> <p>*Option</p>
	XIS-31HCX HD Camera	XIS-31NT Thermal Camera
Image Sensor		
Size	1/2-inch	-
Type	HD, 3CCD	Uncooled pyroelectric element (VOx)
Picture size	1440 (H) x 1080 (V)	640 (H) x 480 (V)
NETD	-	Camera: <0.2 °C, Imager: <0.075 °C
Camera		
Shutter speed	2 to 1/10000 sec.	-
Gain	-3 to +48 dB	Yes (DC level control)
White balance	One Push/Auto/Manual	-
Black balance	One Push/Manual	-
Minimum illumination	0.014 lx (F3, +48 dB gain, Slow shutter (64 Frame))	0 lx
Camera Pan/Tilt range	Pan angle: -135° to +135° Tilt angle: -21.5° to +10°	Pan angle: -135° to +135° Tilt angle: -21.5° to +10°
Camera Pan/Tilt speed	Pan speed: 180°/sec Tilt speed: 30°/sec	Pan speed: 180°/sec Tilt speed: 30°/sec
Lens		
Zoom ratio	19x optical zoom	-
Focal length	f = 12.7 to 241 mm	100 mm
F-number	F3 (Wide), F3.9 (Tele)	F1.4
Minimum object distance	1 m to ∞	10 m to ∞
General		
Mass	Less than 45 kg (90 lb 6 oz)	
Dimensions (W x H x D)	307 x 438 x 876 mm (12 1/8 x 17 1/4 x 34 5/8 inches)	307 x 438 x 804 mm (12 1/8 x 17 1/4 x 31 3/4 inches)
Power requirements	UC: AC 120 V SY: AC 100 to 120 V E: AC 220 to 240 V	
Power consumption	190 W	180 W
Operating temperature	-20°C to +50°C (-4°F to +122°F) (-20°C to -10°C / -4°F to +14°F: constant power on)	
Dust/Water protection	IEC60529 (IP66)	

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