iPIX Security and Surveillance Solutions

Protect Critical Infrastructure in 360-degrees

IPIX's 360VS r2000 is the only fixed-camera video surveillance system that monitors an entire environment with continuous 360-degree spherical viewing and motion detection.

r2000 Advantages

- ◉ 360-degree spherical views minimizing blind spots

- ◉ Facilitates monitoring of entire area, never miss the action due to the position of a camera.

- ◉ Increased reliability with no mechanical moving parts

- ◉ Multiple zones of motion detection and notification via software alert and email

- ◉ Improve effectiveness of monitoring personnel by providing single view of entire environment

- ◉ Install with simple power and network connections

- ◉ Remote management and monitoring via network access

The 360VS r2000 is designed to secure and protect lives, property and critical infrastructure. Applications include Homeland Security needs such as power, water, communications and transportation networks, first responder and intelligence community situational awareness, perimeter security.

The 360VS camera is ready-to-deploy in any fixed mount application. Simply connect the power and network connections and 360-degree views of the entire defensible space is viewable from authorized Windows based PCs on the network.

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Spherical Camera Head   Power and Communications Module

The 360*VS* r2000 provides instant awareness of the entire protected area and can be used stand-alone for observation and detection, or integrated with other cameras as part of an entire security solution. The 360*VS* r2000 provides simultaneous 360-degree motion detection up to a 230 yard radius and is the perfect compliment to pan/tilt/zoom cameras. Simply set the motion alarm to notify local and remote security personnel to investigate areas of interest with other cameras or security staff. The 360*VS* r2000 monitors the entire area for activity. You never miss the action because the camera was pointed in the wrong direction.

360*VS* is optimized for protection, surveillance and situational awareness of critical infrastructure, and soft targets including:

⊙ Critical Infrastructure:
 • Borders
 • Nuclear facilities
 • Water management
   infrastructure such as:
   - Dams
   - Reservoirs
   - Water treatment facilities
 • Ports and harbors
 • Power generating stations
 • Chemical plants
 • Gas and oil pipelines
 • Key transportation facilities
 • Railways and light rail
 • Bridges
 • Airports

⊙ Soft Targets:
 • Schools
 • Monuments
 • Public transportation
 • Religious sanctuaries
 • Stadiums, Coliseums, and other
   public venues

Specifications

The 360*VS* r2000 features patented iPIX software and state-of-the-art video hardware and design to provide a reliable, high performance solution. Video is delivered at up-to fifteen frames per second from the two-mega pixel imaging system powered by dual 64-bit processors. All capture, processing, compression, and networking is handled in the single enclosed unit.

◉ Two-megapixel Digital Video
- Two 1288 x 968 color CMOS digital imaging sensors
- 1936 x 968 pixels – spherical mode
- 2566 x 968 pixels – panoramic mode
- View and stream up-to 15 frames per second live and recorded video
- Scanning Mode: Progressive
- Frame Rate: Up to 15 fps (full array)
- 1.5 LUX lighting performance (equivalent to CCDs)
- Exposure Time: 1–1/10K of frame period
- Day/Night option – automatic switch to b/w in low light
- Total Noise: < 1/2 mV
- Dynamic Range: 62dB

Compression Levels/FPS

1936x968	Color	Greyscale
Low	11	12
Medium	13	15
High	14	15

◉ Field of View
- Dual 185-degree varifocal fisheye lenses
  - 360-degree x 360-degree spherical FOV
  - 360-degree x 300-degree panoramic FOV
- 25 pixels of resolution on a 1∞ horizontal x 1∞ vertical field of view.

360*VS* r2000 Detection Range

	Yards	Meters	Cubic Yards (y^3)	Cubic Meters (m^3)
Person	70	64	1,436,755	1,098,066
Car	230	210	50,965,010	2,386

◉ Motion Detection and Alarms
- Trigger alarm using built-in motion detection
  - 100 unique "include" and "exclude" regions with independent sensitivity
  - Accurate definition of motion regions – small as 4x4 pixel array
- Automatic notification upon a trigger in Viewstation software
- Automatic email notification.

◉ High Performance Dual CPU and Graphics coprocessor
- Dual PowerPC 405 Processors – 500 MIPS
- Equator MAP-CA™, broadband signal processor (DSP) – 30 billion ops/sec
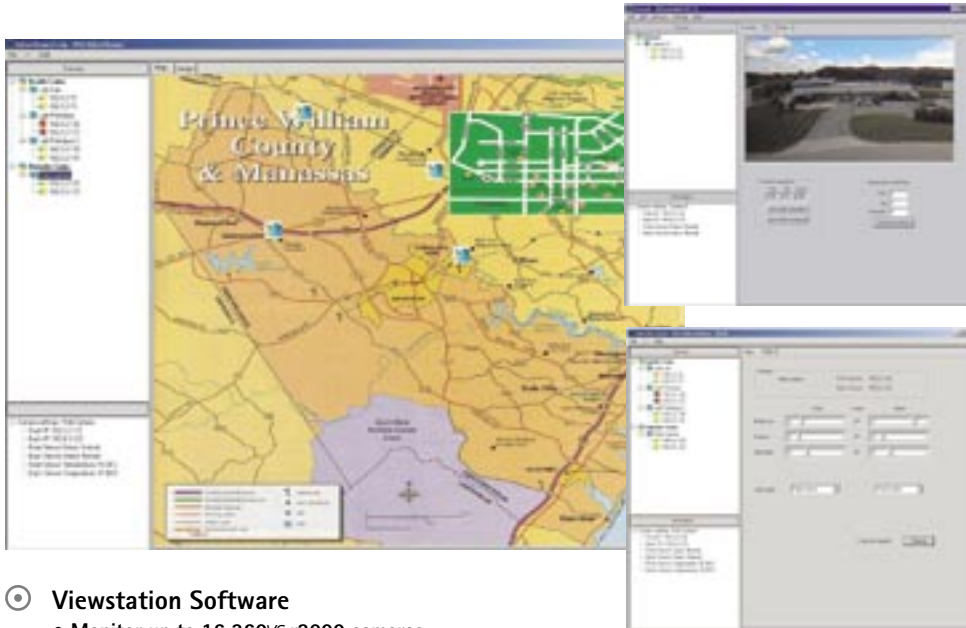
◉ Flexible Networking
- Live view from authorized networked computers
- 10/100BASE-T Fast Ethernet, RJ45 and Optical connectivity capable of connecting distances up to 50 km.
- MD5 encryption to prevent unauthorized access
- Bandwidth throttle for control of maximum bandwidth
- Integrated HTTP and FTP servers
- Built-in Clients: SMTP (email), BOOTP, FTP, SNMP, Telnet, and TFTP
- TCP, IP, & UDP protocols

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◉ **Administrator Software**
- Windows 2000/XP client application.
- Remote configuration and status of camera
- Control all image quality and exposure settings
  - Set shutter speeds for appropriate lighting and action
  - Automatically convert video to black and white during low-light conditions
  - Measure and set exposure globally or for user-defined sub-region
  - Automatically or manually apply gain settings with definable "spot meter"
  - Optimize color quality with selectable lighting options: Daylight, fluorescent, incandescent, mixed, raw
  - Balance compression settings for optimal frame rate, quality and bandwidth requirements
- Set-up motion detection areas and sensitivity
- Establish security levels for access to camera administration and image vieweing
- Network and communications configuration

r2000 Mechanical Specifications

(11.00)

ÿ 6.63

(23.00)

8.25

ÿ 3.05

3.50

*Pole not included

◉ **Viewstation Software**
- Monitor up to 16 360VS r2000 cameras
- Monitor the health of all cameras
- User definable "map" of coverage area, simple click on map to view video
- View status of multiple cameras
- Dual monitor support

◉ **Power**
- 100-240 VAC auto-switching

◉ **Camera Mounting**
- Mounts vertically on pole with 3" OD.
- Power and network routed thru pole

◉ **Environmental**
- Operating temperature range: 32 - 104ºF degrees (0 - 40ºC degrees)
- Humidity: 10-90% non-condensing

◉ **General**
- Construction
  - Aluminum
  - White Powder Coat Finish
- Dimensions: 23" high x 11" wide x 6.63" deep
- Unit Weight: 21 lbs.
- Shipping Weight: 24" high x 20" wide x 9" long   Weight 22 lbs
- Warranty: One year

To find out more about the
360VS r2000, contact our
business department at
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or by email at
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iPIX VS 360