

**SECTION 13770  
VIDEO SURVEILLANCE SYSTEM**

**PART 2 PRODUCTS**

**2.02 SYSTEM SPECIFICATIONS**

A. General

The Contractor shall furnish all material and labor for a complete and operative Video Surveillance System including documentation, programming, and training.

B. Manufacturers

IPIX Corporation  
Reston Executive Center  
12120 Sunset Hills Road, Suite 410  
Reston, VA 20190  
(888) 909-4749 toll free  
(703) 674-4100 phone  
(703) 674-4101 fax  
security@ipix.com

C. Product Specifications

The camera shall optically capture wide field-of-view images at a location to process, store, and replay those images in a manner that recreates the perception of being at that location. The camera shall visualize an environment by capturing a full 360 x 360-degree field of view with 2 fisheye lenses. It shall then de-warp the image to compensate for distortion errors that are inherent in fisheye images and present the image in a manner that can be easily understood by the viewer. The resulting image shall be capable of being viewed in any direction, up-down-left-right with no blind spots. This ability to digitally Pan-Tilt-Zoom shall be performed on both live and recorded video footage by multiple simultaneous users. The associated high-zoom PTZ camera shall be used to optically zoom into areas within the 360-degree image.

1. Camera Assemblies

a. General

- 1) Interface: Commandview Software Suite
- 2) Motion Detection: Programmable Video Motion Detection
- 3) Operating System: Windows XP

b. Operational

- 1) Imager: 2X2 Megapixel sensors
- 2) Active Pixel Count: 3,200 (horizontal) X 1,200 (vertical) pixels
- 3) Dynamic Range: 60 dB
- 4) Auto Recovery: Embedded watchdog
- 5) Luminance: Less than 1 lux

c. Image

- 1) Format: Motion JPEG video
- 2) Compression: High Speed hardware-based image compression
- 3) Output: 15fps (average image size is 300k)

d. Lens

- 1) Len Mount: CS screw mount
- 2) Sensor Format: 1/2-inch color CMOS, 1600 x 1200 pixels
- 3) Mapping: F-Theta
- 4) Field of View: 185-degree circle

- 5) Fixed Focal Length: 1.4mm
- 6) Focus Range: 0.1 meter to infinity
- e. Data Network
  - 1) Connectivity: Single connection, 10/100BaseT, copper or multimode ST fiber
- f. Security
  - 1) Access: Password/username protection for restricted camera access
- g. Electrical
  - 1) AC Voltage: 24VAC +/- 10%
  - 2) Maximum Current: 5.7 Amps
- h. Mechanical
  - 1) Lens Mount: CS type Megapixel lens must be used
  - 2) Unit Weight: Twenty Seven and a half (27.5) pounds
  - 3) Housing Construction: Aluminum housing with polycarbonate dome
  - 4) Housing Finish: White Powder Coat
  - 5) Cable Entry: Bottom Entry, panel mount connectors
  - 6) Mounting Surface Mount: Three (3) inch pole
- i. Environmental
  - 1) Operating Temperature: -10 to 45 Degrees Celsius
  - 2) Storage Temperature: -40 to 70 Degrees Celsius
  - 3) Humidity: 0% to 90% relative, non-condensing
- j. Regulatory
  - 1) Emissions: FCC: Part 15, Class A
  - 2) Certification: CE
  - 3) Safety: UL Listed
- k. Connectors
  - 1) Input Power: Socket Connector
  - 2) Network: RJ-45, MM ST Fiber
- l. PTZ Characteristics
  - 1) Zoom: 23X Optical, 10X Digital, Auto Focus
  - 2) Pan/Tilt: 360-degrees Continuous pan Rotation, +33 degrees to -83 degrees
  - 3) Maximum Image Resolution: 720 C 486
  - 4) Frame Rate: 30 fps maximum
  - 5) Variable Speed Pan: 0.1 degrees to 100 degrees/second with proportional pan

2. Camera Mounts

The camera assembly shall include the mounting hardware.

3. Auxiliary Power Supplies

All fixed cameras may be powered through a local power source. PTZ cameras shall need a separate power supply for heaters, blowers, and wireless interface equipment if needed. The power supply shall be of the appropriate voltage and current rating for each location's needs. The power supply shall be manufactured by Altronix and include surge suppression and lightning protection.

4. Video Transmission Systems

All video transmission shall be over a separate security Ethernet network unless bandwidth is available on [OWNER]'s existing network and approved for use by the IT Department.

5. Wiring

All wiring will be via the Ethernet network except for the power wiring to cameras. Power wiring shall be size according to the distance between the power source and the camera. The voltage drop at the camera shall not be more than five percent (5%) of the supply voltage at the source.

## **PART 3 EXECUTION**

### **3.01 PREPARATION**

- A. The Contractor shall order all required parts and equipment upon notification of award of the Work.
- B. The Contractor shall bench test all equipment prior to delivery to the job site.
- C. The Contractor shall verify the availability of power where required. If a new source of power is required, a licensed electrician shall be used to install it.
- D. The Contractor shall arrange for obtaining all programming information including access times, free access times, door groups, operator levels, etc.