



# United Vision Security Systems

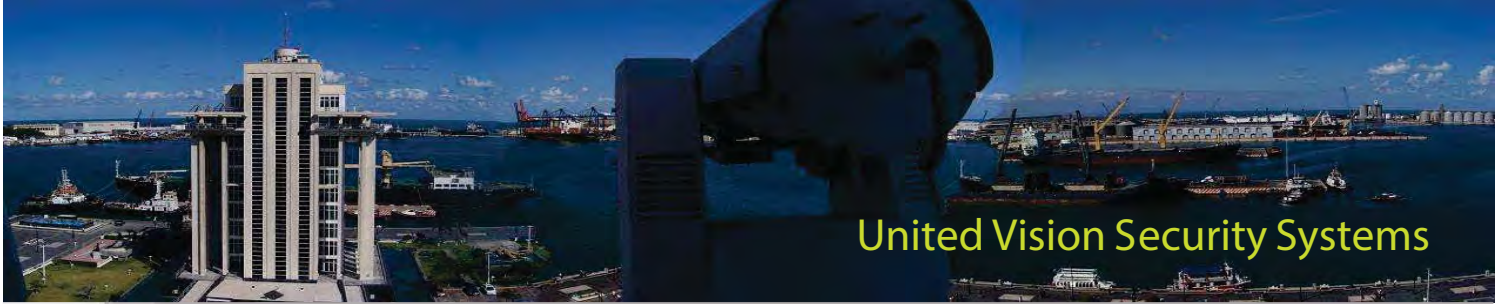


10 Center St. , Chicopee, MA 01013, USA

Email: [sales@ev3000.com](mailto:sales@ev3000.com) Sales Dept.

413-592-8477

Email: [info@ev3000.com](mailto:info@ev3000.com)



United Vision Security Systems

# Long Range Camera System

Our camera system designed for long range surveillance 24/7 utilized the most advance optical sensors and lenses

Day time, Night, Dark, Fog, Rain, and Smoke

Reduction of Airborne  
Interference, e. g. Fog,  
Rain, Sand, Smoke, Snow

Reduction of Heat Haze  
Image Stabilizer

Thermal Eye with 640x480 resolution utilized Digital Detail Enhancement

Day Camera with EMCCD that provides full-color, full-frame video images even at night.

Extreme Lens with Ultra-Telephoto recognizes 16' objects a mile away.

Amazing long range lenses has 16.7-1000/33-2000mm optical zoom

Heavy Duty Stainless Steel Enclosure, Forget rust and salt air corrosion.  
Anti- Rust.                      Anti- Salt Air.                      Anti- Corrosion.

EV3000 using modern technology to reduce the temperature by 20C

Stabilized Pan/Tilt with Video Stabilization



**Eagle Vision EV3000  
Dual Camera System**

**Thermal and  
Color EMCCD**

## PAN/TILT THERMAL & COLOR CAMERAS

- All Weather Rugged Housing Anti-corrosion, Anti Rust, resist high humidity and salt water.  
Special Reflective paint to reduce heat by 15 degree.
- 128 preset positions for perimeter scanning, Tour function
- Pelco-D protocols , can be integrated with any other CCTV system.
- Image overlay combines thermal and video image
- The EV3000 EMCCD colour night vision camera provides high resolution full colour images from full Sunlight down to quarter Moonlight, and thereafter monochrome images down to Starlight.



### Thermal Imager

- Cooled 3-5 micron InSb detector
- 640x480 Insb
- 150-750mm Lens

### Pan/Tilt resolution

High performance, brushless, maintenance-free step motors provide very precise, extremely effective motion control with preset and 0-360 degree endless rotation

### CCTV software with TCP/IP

- Full control of Thermal / Day-Night / Pan/Tilt
- Using standard Protocol Pelco-D

### Options

- \* Digital real time video stabilization
- \* Washer 5 or 10 ltr

Forget rust and salt air corrosion. Anti- Rust. Anti- Salt Air. Anti- Corrosion

### Day/Night Camera

- 1/2" High-Resolution EMCCD
- 0.000008 lx (B&W)
- Lens 16.7-1000mm/33-2000 100X optical zoom
- Reproduces full colour, full motion images in starlight conditions

### Sensor Platform

- Heavy Duty, Stabilized Pan/Tilt

This product can be used in any marine applications, harsh environment. Anti-rust full sealed housing/ and Pan-Tilt. Great for marine, off-shore, sea ports or ships



[www.ev3000.com](http://www.ev3000.com)

10 Center St., Suite 401 & 402

Chicopee MA 01013 USA

[info@ev3000.com](mailto:info@ev3000.com)

413-592-8477





# Long Range Surveillance System

Vision Surveillance Camera System that Never Sleeps

## EV3000 EMCCD

With its built-in night vision Electron Multiplying CCD the Eagle Vision has a light sensitivity that is more than 100 times better than average. The fact that this camera has been selected as the solution for the unmanned surveillance needs of military front lines proves its capability.

100 Times More Sensitive Than A Normal Camera

A new 1/2 inch EM-CCD with electron multiplication is used to achieve exceptional sensitivity.

Color in full motion mode: 0.009 lx  
Color accumulation mode: 0.00015 lx

Monochrome in full motion mode: 0.0005 lx  
Monochrome accumulation mode: 0.000008 lx



**www.ev3000.com**  
**10 Center St., Suite 401 & 402**  
**Chicopee MA 01013 USA**  
**info@ev3000.com      413-592-8477**



## Main Specifications

<b>Imaging device</b>	1/2-inch interline EM-CCD
<b>Total pixels</b>	680(H) x 500(V)
<b>Effective pixels</b>	658(H) x 489(V)
<b>Imaging area</b>	6.58(H) x 4.89(V) mm
<b>Pixel pitch</b>	10.0(H) x 10.0(V) μm (Square pixel)
<b>Scanning system</b>	2: 1 Interlace
<b>Scanning frequency</b>	Horizontal 15.734 kHz      Vertical 59.94 Hz
<b>Synchronization</b>	Internal
<b>Video output</b>	
<b>VBS output</b>	Video 0.7 Vp-p Plus terminal nature
<b>Sync</b>	0.3 Vp-p Negative polarity
<b>Burst</b>	0.3 Vp-p, More than 8 cycles
<b>Impedance</b>	75 Ω Un-balancing.
<b>Signal-processing system</b>	Digital processing (Input 10 bit)
<b>Signal to noise ratio (S/N)</b>	50 dB or more (luminosity signal, Gamma OFF, minimum gain, without detail boost)
<b>Resolution</b>	Horizontal: 480 lines      Vertical: 350 lines (In the central part)
<b>Minimum photographic subject illumination</b>	0.009 lx (Color in full motion, maximum sensitivity setup, F1.4, 50 IRE) 0.0005 lx (Monochrome in full motion, maximum sensitivity setup, F1.4, 50 IRE) 0.00015 lx (Color 64 time accumulation, maximum sensitivity setup, F1.4, 50 IRE) 0.000008 lx (Monochrome 64 time accumulation, maximum sensitivity setup, F1.4, 50 IRE)
<b>Sensitivity (Gain) setup</b>	Auto or a manual (factory set-AUTO)
<b>Electronic shutter</b>	Shutter: 7 steps /AES (factory set-OFF) OFF(1/60), 1/100, 1/125, 1/250, 1/500, 1/1000, 1/2000 sec
<b>Accumulation magnification setup</b>	Auto or a fixed change is possible. (factory set-OFF) 2, 4, 6, 8, 10, 16, 32, 64 times
<b>Backlight compensation</b>	An ON/OFF change is possible (factory set-OFF) Light-measurement area: Nine area to selection is possible.
<b>The output for auto iris lenses</b>	(Square shape 4 pin, JEITA conformity) A galvanometer system/video signal
<b>White balance control</b>	From the following three modes to selection (factory set-ATW)  ATW: The mode which follows automatically  automatic setup  MANUAL: They are red and the mode which carries out blue gain adjustment and unites a white with manual operation
<b>Camera title character display</b>	A display is possible to 22 characters in an alphanumeric character and a sign  possible in the position of a character.
<b>B/W Mode</b>	OFF: The mode of fixation on a color image On: In high sensitivity monochrome image mode AUTO: With luminous intensity OFF of high sensitivity monochrome image, the mode where ON changes automatically In addition, it changes, as for luminous intensity from 3 stages of the HI, the MID and the LOW selective possibility
<b>Picture quality adjustment menu</b>	Following to the menu indication of the picture, various picture quality adjustments and mode selection are possible
<b>DNR</b>	Change of AUTO / MANU (8 steps) (factory set-AUTO)

<b>Video encoder</b>	
<b>Video compression</b>	MPEG-4 Part 2 (ISO/IEC 14496-2) Motion JPEG
<b>Resolutions</b>	160x120 to 704x576
<b>Frame rate MPEG-4</b>	Up to 30/25 (NTSC/PAL) fps at 2CIF, 21/17 fps at 4CIF
<b>Frame rate Motion JPEG</b>	Up to 30/25 (NTSC/PAL) fps at 4CIF
<b>Video streaming</b>	Simultaneous MPEG-4 and Motion JPEG Controllable frame rate and bandwidth VBR/CBR MPEG-4
<b>Image settings</b>	Compression, color, rotation, aspect ratio correction, mirroring Text and image overlay Privacy mask De-interlace filter
<b>Pan/Tilt/Zoom</b>	Wide range of analog PTZ cameras supported (drivers available for download at <a href="http://www.axis.com">www.axis.com</a> ) 20 presets/camera Guard tour PTZ control queue Supports Windows compatible joysticks
<b>Network</b>	
<b>Security</b>	Password protection, IP address filtering, HTTPS encryption, IEEE 802.1X network access control, digest authentication, user access log
<b>Supported protocols</b>	IPv4/v6, HTTP, HTTPS, QoS layer 3 DiffServ, FTP, SMTP, Bonjour, UPnP, SNMPv1/v2c/v3(MIB-II), DNS, DynDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, RTCP, ICMP, DHCP, ARP, SOCKS

<b>Pan / Tilt</b>		
<b>Pan</b>	<b>angle</b>	0-360 (Endless)
	<b>speed</b>	0.1° ~ 60°/sec
<b>Tilt</b>	<b>angle</b>	-60° ~ +30°
	<b>speed</b>	0.1° ~ 30°/sec
<b>Electric Power</b>	240W	
<b>Input Power</b>	AC100~240V Free Voltage	
<b>Temperature</b>	-25 ~ +60 °C	

## IR Day-Night Motorized Zoom Lenses

Optical: 16.7-1000/33-2000

43° 6'	35° 5'	(WIDE)
22° 6'	18° 2'	(WIDE 2X)
0° 46'	0° 37'	(TELE)
0° 23'	0° 18'	(TELE 2X)

**www.ev3000.com**  
**10 Center St., Suite 401 & 402**  
**Chicopee MA 01013 USA**  
**info@ev3000.com      413-592-8477**



JUN 30 2010  
9:44:04PM

CCD VISIBLE

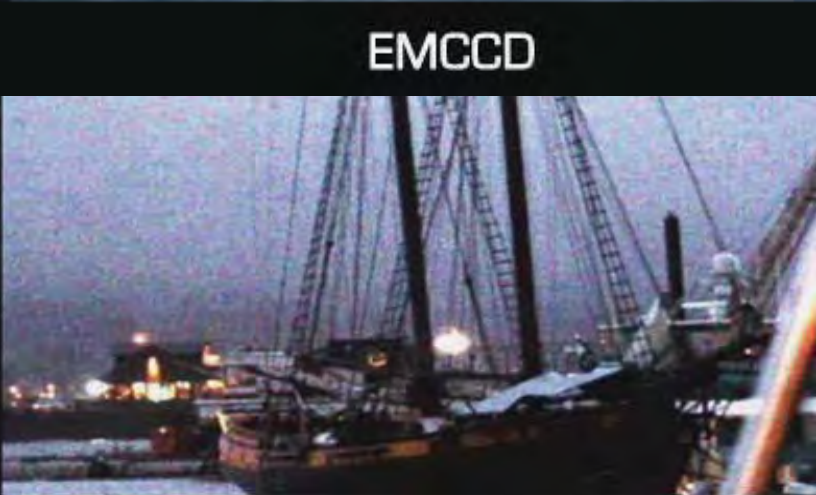


JUN 30 2010  
9:44:05PM

EMCCD



VISIBLE



EMCCD

Eagle Vision EV3000  
Camera System  
Color EMCCD







## United Vision Company Profile

### Corporate Capabilities

United Vision Security Systems, LLC is a Massachusetts company, with its office at 10 Center St., Chicopee, Massachusetts, USA.

United Vision Security Systems, LLC provides across the board expertise in all aspects of CCTV Long Range Camera System, from the design phase to the delivery of complete turnkey solutions.

United Vision Security Systems LLC designs CCTV Camera systems with an emphasis on Long Range capabilities using EMCCD technology and IR thermal Technology. Our team works closely with FLIR , Hitachi, Axis and Raymax systems. We successfully integrate EV3000-D\_IR Extreme Long Range Camera System in a Stainless Steel enclosure with precise Pan/Tilt features that function in diverse platforms such as Ports, Oil platforms, Airports and others locations throughout the world.

United Vision Security Systems works closely with their partners to design advanced multi-sensor long range system using standard protocols to enable fast delivery, easy maintenance and end user friendly.

United Vision Security Systems was the 1<sup>st</sup> company worldwide to integrate a 1000mm lens with EMCCD cameras in stainless Steel platform using fiber-optics for video and controls in a Mexican Navy port monitoring project.

United Vision Security Systems was also the 1<sup>st</sup> company worldwide to integrate a 1500mm lens with EMCCD cameras, and interfaced the camera to a radar System using standard protocol (Finland Navy project).

### CLIENT HIGHLIGHTS

US Coast Guard  
US Air-force  
US Center Command  
US Army Corps of Engineers  
Finland Navy  
Mexico Navy  
Pemex Oil Comapny

---



## United Vision Company Profile

### Mexican Navy Long Range Surveillance System

In December 2007, we were asked by Mexican military through local company to deploy a surveillance system that could have the potential to perform surveillance in Mexican ports for long range targets in low light conditions, the required system shall be able to obtain a clear image of targets located within a radius of 10 to 15 km, in addition to long range it was required system can handle harsh environment as it will be installed near ocean, where corrosion is an issue.

The accepted system was based on the technology supplied by United Vision Solutions to install both the camera & the lens within a high grade stainless steel vandalism resistant Pan-Tilt & Zoom (PTZ) unit for marine use manufactured by United Vision, which allows end-user not only to control the Pan/Tilt/Zoom/Focus of the camera but also all the functionality of both the camera & the lens either in operation control room or inside main control room.

The first Long Range Surveillance System was successfully installed in May 2008. The last 3 systems were installed between November 2008 & January 2009. These systems are installed and fully operational today by Mexican Navy personal in 4 separate geographic locations in Mexico, two systems are in different ports in the Pacific coast and other two monitoring ports in the Atlantic coast.

Each system is controlled locally using computer via TCP/IP, in addition to control camera the computer is working as DVR for 30 days, an CCTV software installed in each operation control room allows only authorized hosts to view & control the system, and then each system is linked via a digital connection (fiber-optics) to central headquarters in Mexico City, where images received are displayed in a central control room, and authorized end users can control any of the systems & record the images obtained for further analysis.

This solution had two additional challenges: first, in the last 3 installations the systems had to be installed in facilities where the existing buildings did not have the necessary height to obtain a satisfactory surveillance of the ports; and second, in the proposed locations where a future system would be installed there were no TCP/IP connectivity.

The height challenge was solved by the construction of 2 stainless steel towers in the chosen location in 2 sites, at the top of which the full systems were installed and the 3rd installation the system was installed at the top of a water tank that had both the height & surface needed to support it. Actual heights of stainless steel towers are 35 and 35 meters (114 & 147 feet).

We provided a special mounting to reduce vibration effect when tele-zooming and system is very stable even operate during high wind weather, in addition to special mounting we are using Video stabilizer to illuminate vibration effects.

For the site where fiber optics was not available, we used TCP/IP wireless links to connect the Long Range Surveillance Systems to nearest fiber-optics point, In the last installation the distance between the System & nearest fiber-optics location where 24 km LOS.

---

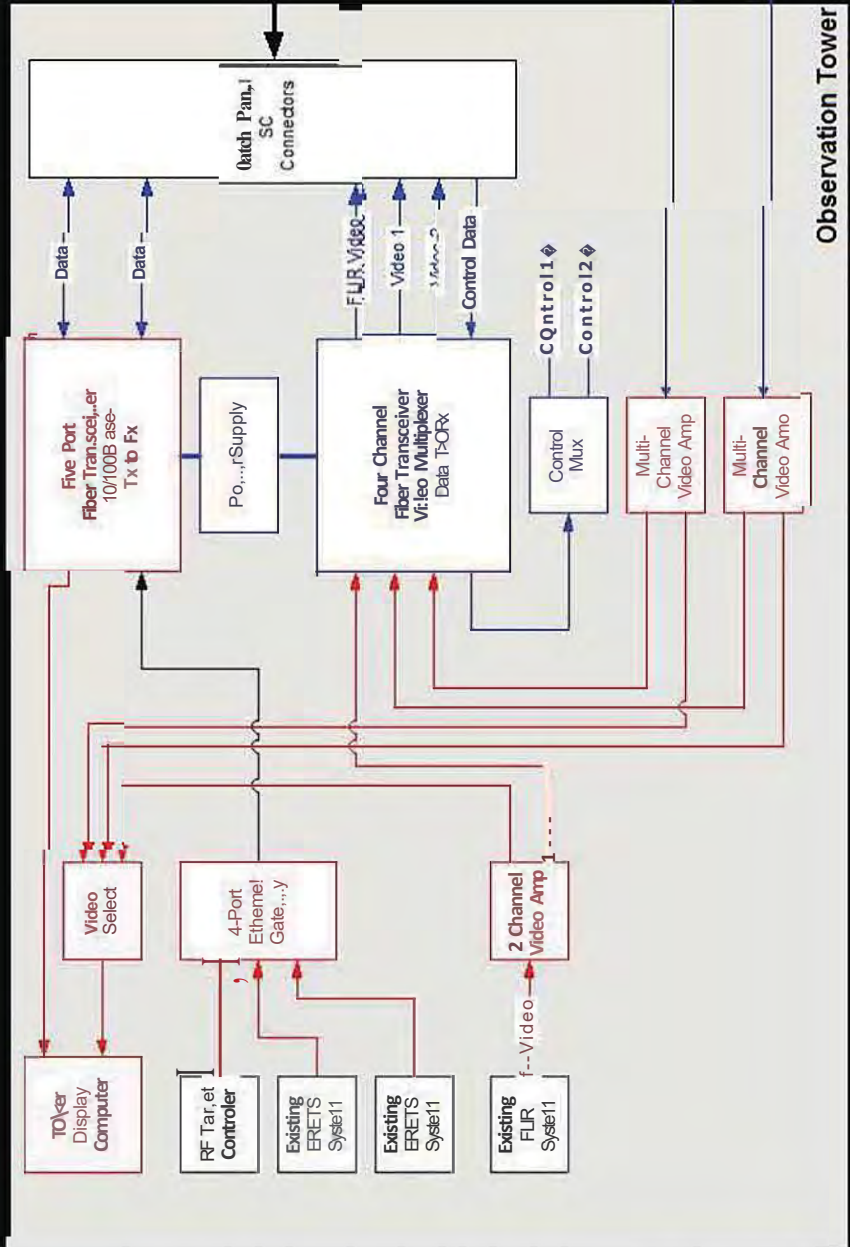
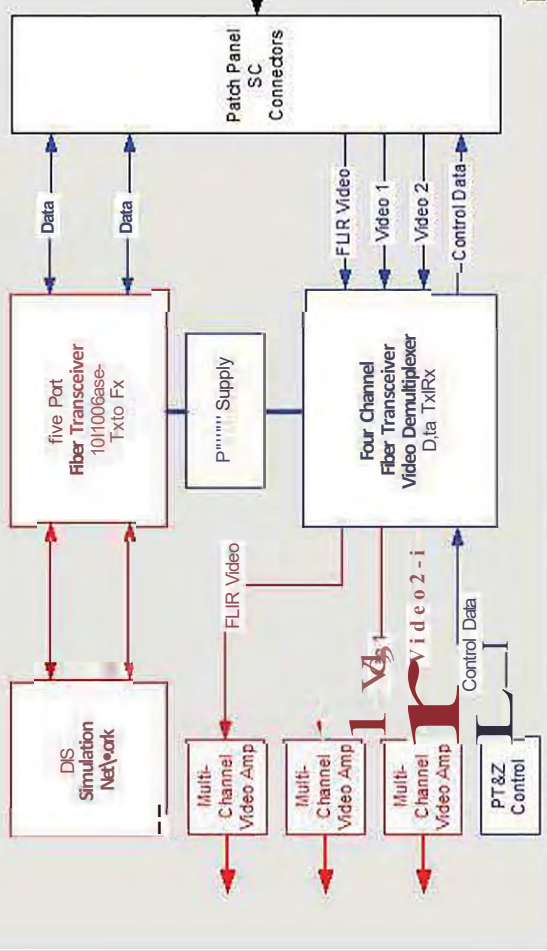


**United Vision Security Systems, LLC**  
[www.ev3000.com](http://www.ev3000.com)

USAirforce Long range Camera system.

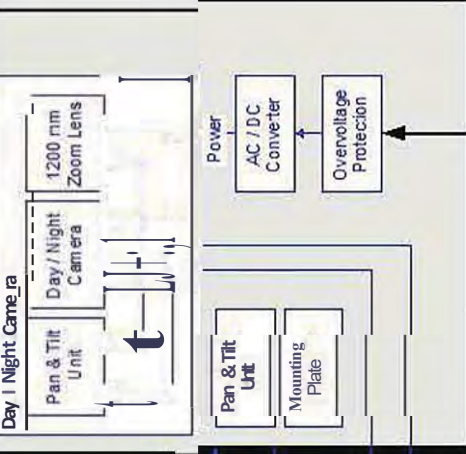
Using Fiber Optics for communication and  
 Integrated with FUR Thermal Camera System

**MCC**



**Observation Tower**

**Camera Installations (2)**



Control 2

Control 1



## Eagle Vision EV3000 Dual Camera System Thermal and Color EMCCD

### PAN/TILT THERMAL & COLOR CAMERAS

#### SYSTEM CONTROL

The tracker software is designed to be controlled via any of the following inputs:

- An off-the-shelf joystick controller
- TCP/IP – 100/10 mbs
- RS232/RS422
- PC Keyboard



[www.ev3000.com](http://www.ev3000.com)

10 Center St., Suite 401 & 402

Chicopee MA 01013 USA

[info@ev3000.com](mailto:info@ev3000.com)

413-592-8477



Long Range Camera  
1000mm PTZ  
EV3000-P-EMCCD 1000









**United  
Vision  
Solutions**

**UVS**

Long Range Day Night Camera

CCTV Surveillance Systems





