ATE/Gemineve-452













The demand for high performance day/night surveillance is pressing for smaller, smarter, less expensive products. At the same time, the environments in which imaging products must function are increasingly hostile. Responding to this demand, the GeminEye ™ modular imaging system was developed. GeminEye not only embraces high performance in a small package, it is designed to be configurable for different applications.

Based on the new QPT-LT dual side-mount positioner, it can be configured with single or multiple camera blocks, for day, night or day/night capability.

As a system, GeminEye is completely upgradeable with new camera blocks by the user in the field. No other competing product on the market can match the performance and quality of GeminEye.















Features

Imaging

Compact/Light Weight

Quick-change Multi-Configurable Camera Module Blocks

- DSP Low Light Color Zoom Camera with Image Stabilization
- High Resolution Thermal Imaging Camera with Digital Zoom
- Long Range IR Illuminator

IP/LAN Network Controllable or Dedicated (Unicom-LT) Controller Full Two-Way Communication

Single Universal Protocol Unaffected by Camera Changes Mil-Std-810F, IP66 Nitrogen Pressurized Enclosures

Marine Environment Resistant

10-30VDC Operation

Continuous 360 Degree Panning

Variable Speed Tilt and Panning

Mobile and Invertible

No Exposed Wiring

Various Mounting Kits Available

Sony's FCB-EX1000/EX1000P color block cameras combine an incredibly powerful 36x zoom lens with a wide/telephoto horizontal field of view, ideally suited for use in security domes and traffic monitoring

The FCB-EX1000/EX1000P incorporates a high-sensitivity 1/4-type EXVIEW HAD CCD, which allows images to be captured at a minimum illumination as low as 0.1 lx." With a newly developed slow AE response function, the camera can adapt to abrupt changes in light while capturing fine image details. In addition, the FCB-EX1000/EX1000P cameras are equipped

with a variety of convenient features such as spherical privacy zone masking, Electronic-Flip, Picture Freeze,





- · High-resolution thermal imaging camera core
- Uncooled Microbolometer detector technology
- public safety and other applications

 Fully compliant with the European Union's
- Restriction of Hazardous Substances (RoHS)















Quick Configure Nitrogen Pressurized Modules



High Resolution Color Camera With 36X Optical/12X Digital Zoom



Specifications

Voltage	10 to 30 VDC with reverse polarity
Pan Range	360° Continuous
Pan Speed	0.25°-100°/sec
Tilt Range	-90° to +90° Non-continuous
Tilt Speed	.25°-60°/sec
Motor Type/Drive	Steppers with belt drive
Connector	Mil Spec, bottom pigtail
Weight	Less than 22lbs. (10kg) with dual cameras
Microprocessor Control	32 Presets and 2 preset tours
Control Formats	Serial RS422/RS485 (IP control option)
Limits	Fixed tilt hard limit, adjustable soft limits
Repeatability	.25°
Materials	Aluminum housings, stainless steel hardware
Marine Resistant	Paint, bearings and gaskets
Enclosures	IP66, sealed and pressurized camera housings
Operating Temperature Range	-25.6° to 131°F (-32° to 55°C)
Position Feedback Resolution & Readout	.01°
Optional Features	Side mount "L" brackets for customer payload Color variations IP control option

Image Blocks

The camera blocks are unique and are designed for quick (one lever) disconnect from the positioning platform. Customers can reconfigure systems from day to night payloads or install both at the same time. These "imaging blocks" contain embedded translation of the camera operating protocol to the universal protocol of the system. Cameras can be "swapped" at will without any change to the system commands. Combined with the new UniCom-LT controller or with the system GUI interface, all camera functions are available immediately when the cameras are installed. Each camera block is fully moisture sealed and pressurized to assure moisture free operation and long lifetime.

UniCom-LT™ Controller

The UniCom-LT controller was specifically designed to manage a network of GeminEye imaging nodes. The powerful digital controller is capable of managing all camera functions and up to 99 nodes, yet is very affordable. For additional information, request UniCom-LT Controller spec sheet.

IR Illuminator

IR illuminators are available for enhancing camera penetration during nighttime or lowlight situations. The illuminators have the options of covert and semi-covert wavelengths

Visible Cameras

Sony 1000 Series
FEATURES: Rugged industrial grade 36X optical zoom, 12X digital zoom electronic image inversion, image stabilization and DSP technology

Thermal Imaging Block Specifications

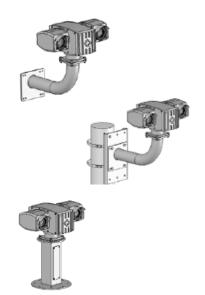
FPA	Uncooled Microbolometer
Spectral Range	7-14 µm
Resolution	Digitally processed 640 x 480 pixels
FOV	25° x 19°
Frame Rate	30 Hz (NTSC)
Analog Video Output	PAL (768x574 pixels)or NTSC(640x480 pixels)
Controls	Digital Zoom, Video Polarity, Video Format
Sensitivity	< 0.50 mK
Anti-blooming	Active
Lens	25°W Athermalized, External Manual Focus Adjustment











Configuration Options

Model	
ATE/GeminEye-DV	CCD Camera Only
ATE/GeminEye-DVIR	CCD and IR Illuminator
ATE/GeminEye-DVTI	CCD and Thermal Imaging Camera
ATE/GeminEye-TI	Thermal Imaging Camera Only

Accessories



Specifically designed to manage a network of GeminEye imaging nodes. The powerful digital controller is capable of managing all.



Power Supply

Specifically designed to manage a network of GeminEye imaging nodes. The powerful digital controller is capable of managing all.



Reusable Shipping Container

Specifically designed to manage a network of GeminEye imaging nodes. The powerful digital controller is capable of managing all.

Specifications subject to change without notice.

Come 1000 Coming Digal, Considerations

Sony 1000 Series Block Specifications		
Image sensor	1/4-type EXview HAD CCD	
Signal system	NTSC or PAL	
Number of total pixels	NTSC Approx. 380,000 pixels PAL Approx. 440,000 pixels	
Lens	36x optical zoom, f=3.4 mm (wide) to 122.4 mm (tele), F1.6 to F4.5	
Digital zoom	12x (432x with optical zoom)	
Angle of view	(H) 57.8° (wide end) to 1.7° (tele end)	
Minimum illumination 1/60 s mode:	1.4 lx (typical) (F1.6, 50 IRE)	
1/4 s mode:	0.1 lx (typical) (F1.6, 50 IRE)	
S/N ratio	More than 50 dB	
Electronic shutter	1/1 to 1/10,000 s, 22 steps	
Gain	Auto	
AE control	Auto	
EV compensation	-10.5 to 10.5 dB (1.5 dB steps)	
Backlight compensation	On	
Flicker cancel	Auto	
Focusing system	Auto	

