

## EXO<sup>®</sup> GEMINEYE

### THERMAL AND HD VISIBLE NETWORK PTZ SHORT RANGE CAMERA SYSTEM



The IP-based EXO GeminEye High Definition (HD) Network Thermal and HD Visible Imaging System is the professional's choice for capturing brilliant, 1080P full HD video in maritime, transportation, and other high risk applications. As the market presses for more technologically advanced imaging products, the environment these products function in grows increasingly hostile. The EXO GeminEye modular pan/tilt imaging system meets the growing demand for high-performance surveillance solutions.

Completely customizable, the EXO GeminEye consists of a modular system of imager blocks that can be easily adjusted to accommodate multiple configurations. The dual integrated Moog sensor system offers the best of both worlds for day / night, real-time surveillance. The EXO GeminEye employs 24/7, clear and accurate observation through difficult environmental challenges significantly enhancing detection, identification, and appropriate response to potential threats. The integration of various sensors into your surveillance system increases the level of intelligence available to your team.

#### KEY FEATURES

- Cost effective, easy integration
- Detection in obscured environments
- 365/24/7 surveillance in challenging environments
- Scalable to augment existing systems
- Network control
- Integrated H.264 and M-JPEG encoder with real time streaming video
- Approx. 2.13 Megapixels daylight camera
- Quick change daylight and thermal camera modules with true plug and play performance
- ONVIF, PSIA (Milestone, ONSSI), and GENETEC API, supported
- Edge recording (16GB microSDHC Class 10 UHS-I)



**EXO**  
SERIES

**MOOG**

### SYSTEM PERFORMANCE

Pan/Tilt	Pan Speed: 0.25° to 100°/sec Tilt Speed: 0.25° to 60°/sec
Repeatability	0.25°
Minimum Step	0.05°
Input Voltage	12 to 32 VDC
Surge Protection	Proprietary surge protection
System Power	20 W Standby; 125 W Peak
Video Compression	H.264 (High, Main and Baseline profiles), Motion JPEG
Resolutions	Up to HD 720p @ 60 fps / 1080p @ 30 fps
Frame Rate (Video encoder supports the following)	H.264: 1920x1080, 1280x720, 640x360, 4CIF, VGA, 2CIF, CIF and Motion JPEG: 4CIF, VGA, 2CIF, CIF
Video Streaming	Two (2) configurable streams, user selectable H.264 or MJPEG
Image Settings	Wide dynamic range (WDR), manual shutter time, compression, color, brightness, sharpness, white balance, exposure control, exposure zones, backlight compensation, fine tuning of behavior at low-light, rotation
Data Rate	64 kbps to 10 Mbps per channel (requires less than 1 Mbps @ 4CIF/30fps)
System Administration	Web GUI interface (HTTP or HTTPS)
Access Control	SSL, Basic and Digest Authentication
Software Update	Fault-tolerant, remote accessible
Alarm Events	Triggered internal event monitoring
Network	Standard 10/100 Base-T Ethernet port
Connector	Mil-spec, bottom egress
Security	Password protection, IP address filtering, HTTPS encryption, IEEE 802.1X network access control, digest authentication, user access log
Supported Protocols	IPv4, HTTP, HTTPS, SSL/TLS, QoS Layer 3 DiffServ, FTP, CIFS/SMB, SMTP, Bonjour, UPnP™, SNMPv1/v2c/v3 (MIB-II), DNS, DynDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, RTCP, ICMP, DHCP, ARP, SOCKS, Telnet, PTL-11
Application Programming Interface	ONVIF, GENETEC API, PSIA (Milestone, ONSSI)
Intelligent Video	Video motion detection
Event Triggers	Video motion detection
Event Actions	Pre- and post-alarm video buffering
Data Streaming	Event data
Ingress Protection Rating	IP66, sealed and pressurized camera housings
Salt/Fog Resistance	MIL-STD-810G, Meth 509.4
Operating Temperature	-32° to +55°C (-25.6° to +131°F)

### 640x512 Resolution Thermal Models:

**EXGVTSHD-S16XXN-F11Z1NF**  
EXO IP HD GeminEye  
1/2.8 CMOS Visible Camera &  
15 to 100 mm Thermal Camera

**EXGVTSHD-S16XXN-F11F1NF**  
EXO IP HD GeminEye  
1/2.8 CMOS Visible Camera &  
25 mm Thermal Camera

**EXGVTSHD-S16XXN-F11Z2NF**  
EXO IP HD GeminEye  
1/2.8 CMOS Visible Camera &  
26 to 105 mm Thermal Camera

**EXGVTSHD-S16XXN-F11F2NF**  
EXO IP HD GeminEye  
1/2.8 CMOS Visible Camera &  
50 mm Thermal Camera

### THERMAL CAMERA PERFORMANCE SPECIFICATIONS

Pixel Pitch	17µm
Maximum Lens Aperture	F1.1 (25 mm); F1.2 (50 mm); F1.4 (15 to 100 mm); F1.6 (26 to 105 mm)
Horizontal Viewing Angle	25° (25 mm); 12.4° (50 mm); 39.9° to 6.2° (15 to 100 mm); 23.6° to 5.9° (26 to 105 mm)
Digital Zoom	2x to 8x continuous (26 to 105 and 15 to 100 lenses are continuous optical zoom)
Frame Rate	30 Hz NTSC; 25 Hz PAL

### VISIBLE CAMERA PERFORMANCE SPECIFICATIONS

Image Sensor	1/2.8-type Exmor CMOS
Lens	30x optical zoom, f=4.3 mm (wide) to 129 mm (tele)
Maximum Lens Aperture	Minimum of F1.6 (wide) to F4.7 (tele)
Minimum Illumination	Color: 0.5 lux at 50 IRE F1.6 B/W: 0.04 lux at 50 IRE F1.6
Horizontal Viewing Angle	1080p mode 59.5 (wide end) to 2.1 (tele end)
No. of Pixels	Approx. 2.13 Megapixels
Digital Zoom	12x (360x with optical zoom)

### GEMINEYE ACCESSORIES

	Part Number	Description
Power Supply Outdoor	7-08964	Power Supply, Outdoor, Pole Mountable, 24 VDC, 10.2 A
Tripod	4-74434-FB	Tripod Samson 3 Section Leg No Column 4 in ft Plate
	4-74432-FB	Tripod Samson 2 Section Leg with PTU Adaptor Mount
Test Stand Kit	7-17555	Kit Test Stand GeminEye
Mounts	7-17567	Pedestal Mount
	7-17564	Wall Mount
	7-17565	Pole adapter (requires addition of wall mount)
	7-17566	Corner adapter (requires addition of wall mount)

These products are subject to export control laws and regulations of the United States government and fall under the control jurisdiction of either ITAR or EAR regulations. Please contact our company Export Representative at +1-716-687-4930 for additional export information.

# MOOG