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)
**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**
- Standby: 20 W
- Peak: 125 W

**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, GoS/LLS, 3 DiffServ, FTP, CIFS, SMB, SMTP, Bonjour, UPnP(TM), SNMPv1/v2c/v3 (MB-LL), DNS, DynDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, RTCP, ICMP, DHCP, ARP, SOCKS, Pelco-D, 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-F11Z2NF**
  - EXO IP HD GeminEye
  - 1/2.8 CMOS Visible Camera & 26 to 105 mm Thermal Camera
- **EXGVTSHD-S16XXN-F11F1NF**
  - EXO IP HD GeminEye
  - 1/2.8 CMOS Visible Camera & 25 mm Thermal Camera
- **EXGVTSHD-S16XXN-F11F2NF**
  - EXO IP HD GeminEye
  - 1/2.8 CMOS Visible Camera & 50 mm Thermal Camera

**Thermal Camera Performance Specifications**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pixel Pitch</td>
<td>17µm</td>
</tr>
<tr>
<td>Maximum Lens Aperture</td>
<td>F1.1 (25 mm); F1.2 (50 mm); F1.4 (15 to 100 mm); F1.6 (26 to 105 mm)</td>
</tr>
<tr>
<td>Horizontal Viewing Angle</td>
<td>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)</td>
</tr>
<tr>
<td>Digital Zoom</td>
<td>2x to 8x continuous</td>
</tr>
<tr>
<td>Frame Rate</td>
<td>30 Hz NTSC; 25 Hz PAL</td>
</tr>
</tbody>
</table>

**Visible Camera Performance Specifications**

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

**GEMINENEY ACCESSORIES**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>7-08904</td>
<td>Power Supply, Outdoor, Pole Mountable, 24 VDC, 10.2 A</td>
</tr>
<tr>
<td>7-17555</td>
<td>Kit Test Stand GeminEye</td>
</tr>
<tr>
<td>7-17567</td>
<td>Pedestal Mount</td>
</tr>
<tr>
<td>7-17564</td>
<td>Wall Mount</td>
</tr>
<tr>
<td>7-17565</td>
<td>Pole adapter (requires addition of wall mount)</td>
</tr>
<tr>
<td>7-17566</td>
<td>Corner adapter (requires addition of wall mount)</td>
</tr>
</tbody>
</table>

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.