

## EX30 IP Infrared Imager™

powered by **BLACKDIAMOND™** Technology

The EX30 is a single-sensor Infrared Imager™ featuring IP Infrared Imaging (i<sup>3</sup>) design and the longest identification range at 150ft at telephoto. Additionally, EX30 provides detection-level night-time imaging up to 350ft, resulting in outstanding versatility for critical 24/7 surveillance applications.

Extreme's innovative i<sup>3</sup> design harnesses the power of infrared illumination to deliver outstanding images day or night, integrating seamlessly with existing IP network infrastructure. The EX30-IP Infrared Imager™ includes a 5-50mm IR-corrected lens and award-winning Black Diamond™ infrared illumination, calibrated to provide High-Fidelity™ night vision imaging.

The NEMA4X-rated EX30 provides outstanding day and night imaging performance with lower band-width network impact than standard IP cameras. Ideal for critical applications such as force protection, perimeter surveillance and public area surveillance.



IP Infrared Imaging  
(i<sup>3</sup>) Design

Black Diamond™  
Infrared

NEMA4 Rated



This luminaire has been approved as dark-sky friendly by the International Dark-Sky Association.

### DCRI Performance Parameters at 850nm

|                |               |
|----------------|---------------|
| Detection      | 350ft (~100m) |
| Classification | 300ft (90m)   |
| Recognition    | 250ft (75m)   |
| Identification | 150ft (45m)   |

## Performance Benefits

- **IP Infrared Imaging (i<sup>3</sup>)** harnesses the power of infrared illumination to deliver outstanding images day or night, integrating seamlessly with existing IP network infrastructure
- Award-winning Black Diamond™ technology combined with precision engineered optics for **High-Fidelity™ detection-level night-time imaging performance to 350ft (~100m)** in total darkness
- Black Diamond™ reduces night-time image noise for improved compression performance and **low bit rates** while delivering the necessary details for **effective night-time function of video analytics**
- **Dual-stream IP connectivity** with MPEG-4 and MJPEG compression at 30fps for remote access, scalability and full compatibility with the world's most advanced surveillance networks
- Field-proven **NEMA4X all-weather design** for long-term reliable performance in harsh environments
- **Reduced total cost of ownership:** lower installation costs, IP scalability and flexibility

## Key Attributes



### Black Diamond™ High Fidelity™ Infrared Technology

- Award-winning Black Diamond™ technology eliminates “hotspot” foregrounds and under-exposed backgrounds
- Extended range infrared to deliver detection-level imaging at 350ft (~100m)
- Reduces image noise and enables better compression, reducing bit rates and enhancing network stability
- Enables effective night-time performance of video analytics

### Precision Engineered Performance Optics

- 550 TVL 1/3” LXR Mechanical Filter CCD for vivid daytime color and outstanding night vision performance
- 5-50mm infrared-corrected lens delivers a wide surveillance range from 150ft (45m) to 350ft (~100m) for maximum imaging versatility
- Infrared-corrected lens eliminates focus shift and infrared bleed

### Rugged All-Weather Construction

- Field-proven NEMA4X weather-sealed housing
- Cable-managed wall bracket
- Sliding optical chassis for easy-optical adjustments

### High Performance Video Encoder

- MPEG-4 and MJPEG at 30fps, full resolution
- Dual-stream video allows for simultaneous high resolution viewing with high efficiency storage (or vice versa)
- Supported by a wide range of VMS and NVR solutions

### IP Infrared Imaging - i<sup>3</sup>

- Harnesses the power of infrared illumination to deliver outstanding images day or night
- Integrates seamlessly with IP network including video analytics
- Black Diamond™ infrared illumination improves encoder efficiency and bit rate, enhancing network stability



## Performance images

Extreme CCTV Infrared Imagers™ are tested for performance to DCRI surveillance levels, a standard developed originally by John Johnson in his foundational work for the United States Army Night Vision lab. Johnson’s Criteria provide a method of quantifying the night-time performance delivered by Extreme CCTV night vision cameras.



EX30 night time imaging performance. The image above shows Identification-level imaging at 150ft (45m).



**Conventional Infrared Illumination**  
Background under-exposed.  
Foreground over-exposed.

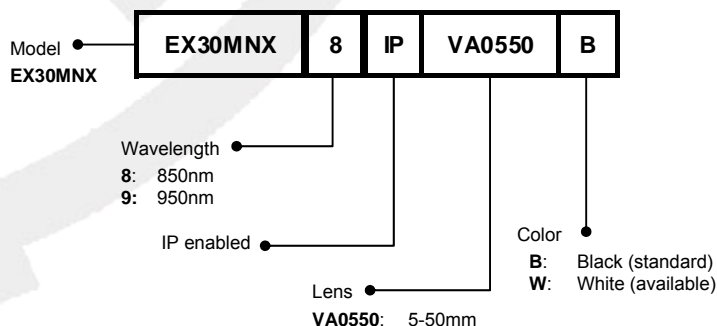


**Black Diamond™ Infrared Illumination**  
High-Fidelity™ performance ensures a photonicly balanced image.

## Specifications

| EX30 IP Infrared Imager™ powered by Black Diamond™ Technology |  |
|---|--|
| <b>Optics</b>   |  |
| CCD   | MX7 with Mechanical Filter technology  |
| Effective Pixels  | 768 (H) x 494 (V)  |
| Resolution  | 550 TVL color / 570 TVL monochrome   |
| S/N Ratio   | Greater than 48dB (AGC off)  |
| Daytime Sensitivity   | 0.02 Lux with F1.4 lens  |
| Night-time Sensitivity  | 0 Lux - works in total darkness  |
| Lens  | Infrared corrected 5-50mm varifocal auto-iris, DC drive  |
| Gamma   | 0.45   |
| Video Output  | 1Vp-p, 75Ω   |
| Day-Night Switching   | Photocell-controlled, automatic  |
| <b>Infrared Illumination</b>                                  |  |
| Photocell   | Automatic, sensitivity adjustable  |
| LEDs  | Black Diamond™ High-Fidelity™ Infrared, intensity adjustable   |
| Wavelength  | 850nm (semi-covert) or 950nm* (covert) [*For 950nm, 74% distance loss from stated distances at 850nm]          |
| Night Vision Ranges   | Detection 350ft (~100m)   Classification: 300ft (90m)   Recognition: 200ft (60m)   Identification: 150ft (45m) |
| <b>IP</b>   |  |
| Interface   | Ethernet 10/100Base-T  |
| Protocols   | TCP/IP, RTP/IP, UDP/IP, DNS, NTP, HTTP, FTP, DHCP client   |
| Security  | SSL-based authentication   |
| Compression   | MPEG-4 SP and MJPEG, up to 30 frames per second, dual-stream selectable  |
| Dual Stream   | 4CIF, 30 FPS and CIF, 15 FPS programmable  |
| Frame Rate  | 1-30 FPS programmable (full motion)  |
| Bandwidth   | Configurable from 30 Kbps to 6 Mbps  |
| Connector   | RJ45   |
| <b>Physical</b>   |  |
| Operational Range   | -50°C to +50°C   -58°F to +122°F   |
| Weight  | 3.4 lbs   1.4 kg   |
| Bracket   | Cable managed wall bracket included  |
| Construction  | Robust aluminum casting  |
| Finish  | Baked enamel finish, black standard  |
| Overall Dimensions  | 131mm (H) x 139mm (W) x 207mm (D)   5.2" (H) x 5.5" (W) x 8.2" (D)   |
| Environmental   | NEMA4X   |
| <b>Electrical</b>   |  |
| Voltage Supply  | 12V to 24V AC/DC   |
| Power Consumption   | 36 W max   |

## Part Numbers



## Optional Accessories

- EXPS.009** Power Supply, 120VAC / 24 VAC, 2.5A
- [EXMB.015](#) Pole Mount Adapter
- [EXMB.061](#) Pole Top Bracket
- EXMB.033** Corner Mount Bracket
- EXSH01B** Sunhood, black
- [EXMB.029B](#) Ceiling Mount Bracket