

# ZX55-IP Infrared Imager

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Invented for life



- ▶ High performance day/night camera for perimeter surveillance and critical asset monitoring
- ▶ Integrated Intelligent Video Analysis (IVA)
- ▶ Black Diamond Infrared Illumination Technology
- ▶ Long-range Classification and Recognition Level Performance
- ▶ Rugged All-Weather Construction

The ZX55-IP is an Infrared Imager for long range, critical outdoor Day/Night surveillance applications. The ZX55-IP features a 9-90 mm lens, powerful Black Diamond infrared illumination and a powerful processor for Intelligent Video Analysis (IVA). The ZX55-IP also provides night imaging up to 300 m (1000 ft) resulting in unparalleled performance for long range 24/7 surveillance applications. To effectively monitor critical assets and long stretching perimeters, the ZX55-IP incorporates a 9-90 mm varifocal lens. Narrow or wide angle shots are possible for the preferred field of view, with the system capable of delivering identification-level performance to 100 m (330 ft), providing the ability to distinguish facial features. This high level imaging is also delivered with lower network bandwidth impact than standard IP cameras. The weather-rated ZX55-IP features top and side sunshields to reflect heat in applications that expose the unit to intense direct sunlight. The integral flow-through-vent also allows airflow to directly cool the high performance system and lower internal temperatures. The ZX55-IP is ideal for critical applications such as force protection, perimeter surveillance, and critical asset monitoring.

## Functions

### Intelligent Video Analysis (IVA)

- On-board video content analysis monitors scene activity and flags user-defined events such as alarms (additional license required)

### Black Diamond Infrared Illumination Technology

- Black Diamond technology eliminates hotspot foregrounds and underexposed backgrounds
- Extended range infrared to deliver night imaging to 300 m (1000 ft)
- Reduces image noise and enables better compression, reducing bit rates and enhancing network stability
- Enables effective night-time performance of video analytics

### Rugged All-Weather Construction

- Field-proven NEMA4X weather-sealed housing
- Cable-managed wall bracket
- Dedicated camera bay for easy-optical adjustments
- Sunshields on top and sides for optimal heat deflection
- Designed to survive 250 km/h (155 mph) wind loading

### High Performance Video Encoder

- MPEG-4 and MJPEG at 30 fps, full resolution

- Tri-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

#### Precision Engineered Performance Optics

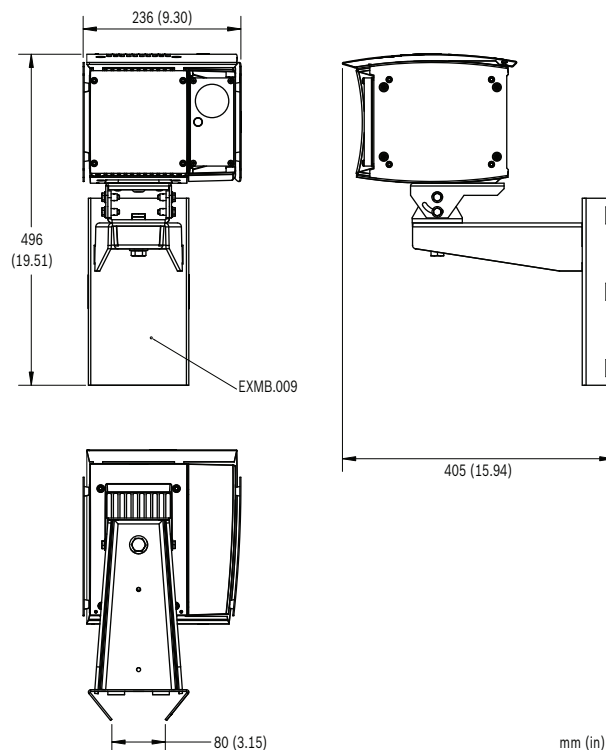
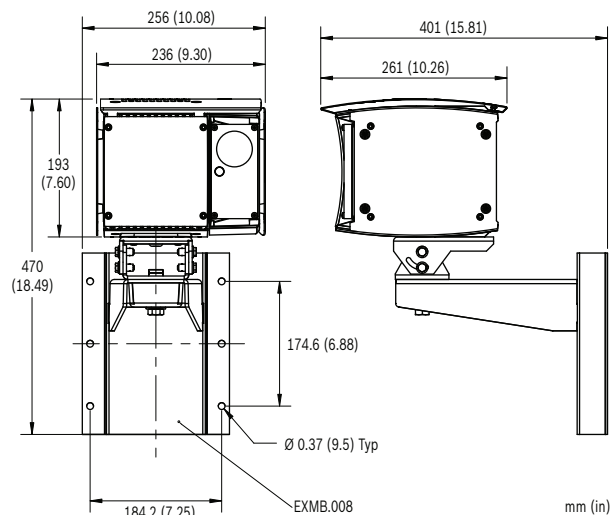
- 540 TVL hi-resolution day/night CCD for vivid daytime color and outstanding night vision
- 9-90 mm infrared-corrected lens delivers a wide DCRI surveillance range to 300 m (1000 ft) for maximum imaging versatility
- Infrared-corrected lens eliminates focus shift and infrared bleed

#### Certifications and approvals

| Region | Certification |
|--------|---------------|
| Europe | CE            |
| USA    | FCC           |
| Canada | CSA           |

#### Installation/configuration notes

##### Dimensions



#### Technical specifications

##### Video

|                          | ZX55-IP Infrared Imager                                |
|--------------------------|--------------------------------------------------------|
| Sensor                   | 1/3-inch Day/Night CCD                                 |
| Effective Pixels (H x V) | NTSC: 768 x 494                                        |
| Effective Pixels (H x V) | PAL: 752 x 582                                         |
| Resolution               | 540 TVL color / 540 TVL monochrome                     |
| Daytime Sensitivity      | 0.02 Lux at F1.4                                       |
| Night time Sensitivity   | 0 Lux - works in total darkness                        |
| Lens                     | IR corrected 9 to 90 mm varifocal auto-iris, DC drive  |
| Gamma                    | 0.45                                                   |
| Video Output             | 1 Vpp, 75 ohm                                          |
| Day-Night Switching      | Photocell-controlled, automatic                        |
| Photocell                | Automatic, sensitivity adjustable                      |
| Controls                 | OSD with joystick operation                            |
| Illumination             | Black Diamond Infrared LED array, intensity adjustable |
| Wavelength               | 850 nm (semi-covert) or *940 nm (covert)               |

\*(For 940 nm, 50-60% distance loss from stated distances at 850 nm)

**Range Specifications**

|                | Night Vision    | IR Horizontal Field of View (10° beam angle) |
|----------------|-----------------|----------------------------------------------|
| Detection      | 300 m (1000 ft) | 45 m (150 ft)                                |
| Classification | 250 m (820 ft)  | 35 m (120 ft)                                |
| Recognition    | 150 m (500 ft)  | 25 m (80 ft)                                 |
| Identification | 100 m (330 ft)  | 15 m (50 ft)                                 |

**Interfaces**

|          |                    |
|----------|--------------------|
| Ethernet | 10/100 Base-T RJ45 |
| Analog   | PAL or NTSC BNC    |

**IP**

|             |                                                                              |
|-------------|------------------------------------------------------------------------------|
| Protocols   | Telnet, RTP, HTTP(S), ARP, TCP, UDP, IP, ICMP, DHCP, IGMPv2/v3, SNMP, 802.1x |
| Compression | MPEG-4 SP and MJPEG, up to 30 frames per second, tri-stream selectable       |
| Frame Rate  | 1-30 FPS programmable (full motion)                                          |
| Bandwidth   | Configurable from 9.6 Kbps to 6 Mbps                                         |

| Resolution and Frame Rates | PAL (H x V) | NTSC (H x V) |
|----------------------------|-------------|--------------|
|----------------------------|-------------|--------------|

|                    |           |           |
|--------------------|-----------|-----------|
| 4CIF: 25/30 IPS    | 704 x 576 | 704 x 480 |
| 2CIF: 25/30 IPS    | 704 x 288 | 704 x 240 |
| half D1: 25/30 IPS | 352 x 576 | 352 x 480 |
| CIF: 25/30 IPS     | 352 x 288 | 352 x 240 |
| QCIF: 25/30 IPS    | 176 x 144 | 176 x 120 |

**Electrical**

|                   |                     |
|-------------------|---------------------|
| Voltage Supply    | 12 to 24 VDC or VAC |
| Power Consumption | 58 W max            |

**Mechanical**

|                    |                                                          |
|--------------------|----------------------------------------------------------|
| Construction       | Aluminum extrusion / polycarbonate / ABS alloy           |
| Finish             | Anodized housing / acrylic urethane paint for sun shield |
| Window             | Injection molded 2.5 mm window                           |
| Bracket            | Heavy duty cable managed bracket included                |
| Dimensions (HxWxD) | 296 x 236 x 377 mm (12 x 9 x 15 in)                      |
| Weight             | 8.6 kg (19 lb)                                           |

**Environmental**

|                             |                                                                   |
|-----------------------------|-------------------------------------------------------------------|
| Operation Temperature Range | -50 °C to +50 °C (-58 °F to +122 °F)                              |
| Wind Load                   | Designed to survive 250 km/h (155 mph) wind loading               |
| Environment                 | Certified to CSA Type 4X outdoor weather rating. Designed to IP67 |

**Ordering information****NEI-558V90-21BS IP IR Imager**

Long range IP IR Imager, Day/night, 9-90 mm, 850 nm Black Diamond, NTSC, black, wall mount  
Order number **NEI-558V90-21BS**

**NEI-558V90-11BS IP IR Imager**

Long range IP IR Imager, Day/night, 9-90 mm, 850 nm Black Diamond, PAL, black, wall mount  
Order number **NEI-558V90-11BS**

**NEI-559V90-21BS IP IR Imager**

Long range IP IR Imager, Day/night, 9-90 mm, 940 nm Black Diamond, NTSC, black, wall mount  
Order number **NEI-559V90-21BS**

**NEI-559V90-11BS IP IR Imager**

Long range IP IR Imager, Day/night, 9-90 mm, 940 nm Black Diamond, PAL, black, wall mount  
Order number **NEI-559V90-11BS**

**NEI-558V90-21BP IP IR Imager**

Long range IP IR Imager, Day/night, 9-90 mm, 850 nm Black Diamond, NTSC, black, pole mount  
Order number **NEI-558V90-21BP**

**NEI-558V90-11BP IP IR Imager**

Long range IP IR Imager, Day/night, 9-90 mm, 850 nm Black Diamond, PAL, black, pole mount  
Order number **NEI-558V90-11BP**

**NEI-559V90-21BP IP IR Imager**

Long range IP IR Imager, Day/night, 9-90 mm, 940 nm Black Diamond, NTSC, black, pole mount  
Order number **NEI-559V90-21BP**

**NEI-559V90-11BP IP IR Imager**

Long range IP IR Imager, Day/night, 9-90 mm, 940 nm Black Diamond, PAL, black, pole mount  
Order number **NEI-559V90-11BP**

**Accessories****ALTV244220 230 VAC Power Supply**

Four-channel, 230 VAC, 50 Hz, 84 VA out, wall mount, indoor  
Order number **ALTV244220**

**ALTV244UL 120 VAC Power Supply**

Four-channel, 120 VAC, 60 Hz, 84 VA out, wall mount, indoor  
Order number **ALTV244UL**

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