



ZX55 Infrared Imager



The ZX55 is an Infrared Imager for long range, critical outdoor Day/Night surveillance applications. The ZX55 features a 9-90 mm lens and powerful Black Diamond infrared illumination. The ZX55 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 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.

The weather-rated ZX55 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 is ideal for critical applications such as force protection, perimeter surveillance, and critical asset monitoring.

Functions

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)

- ▶ **High performance day/night camera for perimeter surveillance and critical asset monitoring**
- ▶ **Black Diamond Infrared Illumination Technology**
- ▶ **Long-range Classification and Recognition Level Performance**
- ▶ **Rugged All-Weather Construction**

- 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

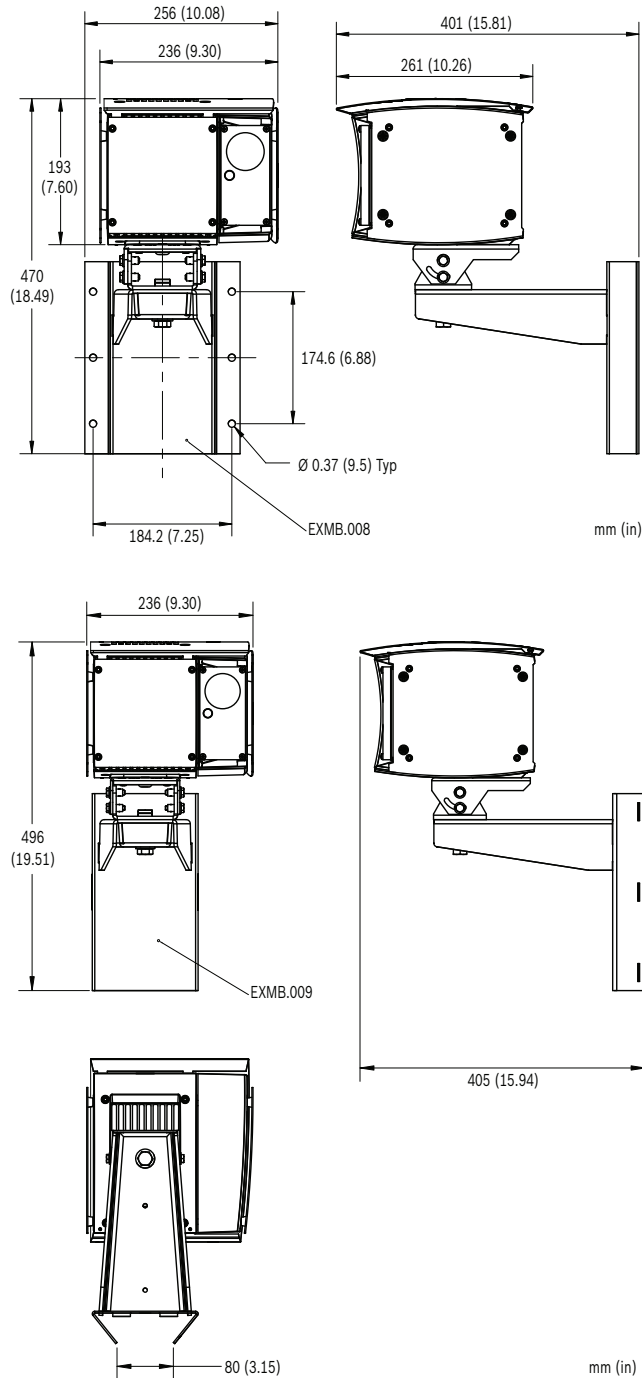
- Field-proven NEMA4X weather-sealed housing
- Cable-managed wall bracket
- Dedicated camera bay for easy-optical adjustments
- Sunshields on top and sides for optimal heat deflection
- Designed to survive 250 km/h (155 mph) wind loading

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

Installation/Configuration Notes

Dimensions



Technical Specifications

Video

ZX55 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
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

Analog PAL or NTSC BNC

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

VEI-558V90-21BS IR imager Long range IR Imager, Day/night, 9-90 mm, 850 nm Black Diamond, NTSC, black, wall mount	VEI-558V90-21BS
VEI-558V90-11BS IR Imager Long range IR Imager, Day/night, 9-90 mm, 850 nm Black Diamond, PAL, black, wall mount	VEI-558V90-11BS
VEI-559V90-21BS IR imager Long range IR Imager, Day/night, 9-90 mm, 940 nm Black Diamond, NTSC, black, wall mount	VEI-559V90-21BS
VEI-559V90-11BS IR imager Long range IR Imager, Day/night, 9-90 mm, 940 nm Black Diamond, PAL, black, wall mount	VEI-559V90-11BS
VEI-558V90-21BP IR Imager Long range IR Imager, Day/night, 9-90 mm, 850 nm Black Diamond, NTSC, black, pole mount	VEI-558V90-21BP
VEI-558V90-11BP IR Imager Long range IR Imager, Day/night, 9-90 mm, 850 nm Black Diamond, PAL, black, pole mount	VEI-558V90-11BP
VEI-559V90-21BP IR Imager Long range IR Imager, Day/night, 9-90 mm, 940 nm Black Diamond, NTSC, black, pole mount	VEI-559V90-21BP
VEI-559V90-11BP IR Imager Long range IR Imager, Day/night, 9-90 mm, 940 nm Black Diamond, PAL, black, pole mount	VEI-559V90-11BP

Accessories

ALTV244220 230 VAC Power Supply 230 VAC, 50 Hz, 84 VA out, wall mount	ALTV244220
ALTV244UL 120 VAC Power Supply 120 VAC, 60 Hz, 84 VA out, wall mount	ALTV244UL

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