ROGUE

# Rugged, Mobile Surveillance

Designed for versatility and rugged all-weather performance on land and maritime applications, the Rogue provides a high level of customizability; offering multiple night vision options, 12MP/4K spotter modules, and LRFs (Laser Range Finders) rated for distances up to 21km. For enhanced night vision, it can be equipped with SD or HD thermal sensors, enabling vehicle detection up to 5km. The visible sensor also seamlessly integrates with either ZLID™ laser IR, ZIR (Zoom LED IR), or ZWL (Zoom White Light) illumination, providing high-definition nighttime performance up to 750m in complete darkness. The Rogue is the smallest PTZ to feature our Octagon API and absolute positioning capability, which enables basic tracking functions including radar slew-to-cue.

## Key Features:

- Up to 12MP 4K High Resolution Sensors
- Impressive Visible Zoom Options from 3X to 30X
- Optical Field of View Options from 74° to 2.14°
- 12µm 640×480 VOx Uncooled Thermal Imager or Optional 1024×768 HD Thermal Resolution
- Eye Safe Active IR LED Illumination up to 180m or Optional ZLID Illumination for up to 750m of Night Vision
- Integrated LRF (Laser Rangefinder) Rated up to 21km
- Video, Power and Telemetry Over a Single Rugged Cable
- Rugged IP66 and up to -30° to +65°C Weather Resistance

## Optional Features:

- Magnetic Mount
- Vibration Mount
- Thermography
- 940nm “Stealth” ZLID™ Illumination
- Nano Coating for Viewing Window
- Zoom White Light LED Illumination

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# Day and Night Vision Options


Thermal Image


ZLID Image

INFINITI

## VIS/NIR Optical Camera

Infiniti's VIS/NIR zoom cameras utilize high-end CMOS sensors to offer excellent spectral sensitivity in the visible daylight and near-infrared wavelengths of light to provide high-quality images optimized for long-range surveillance. They are designed to provide industry-leading performance and quality, with image resolutions ranging from 2MP (1080p HD) to 8MP (4K UHD) and 12MP. Precision engineered IR-corrected continuous zoom lens options offer range of focal lengths with zoom factors from 3X up to 30X optical zoom. At full zoom, our longest range 30X lens option has the equivalent field of view of a "full-frame" DSLR camera with a 950mm lens.

## IR LED or ZLID™ Night Vision

The Rogue offers an 80m IR LED or up to a 180m Zoom IR array for eye-safe illumination options. For further ranges, Infiniti's ZLID (Zoom Laser IR Diode) technology synchronizes the IR intensity and area illumination with the zoom lens for outstanding active IR performance for clear images in complete darkness with illumination up to 750m.

Our optional 940nm "Stealth" ZLID offers covert illumination that is completely invisible to the human eye, with no red glow visible (808nm will often have a faint red glow at the light source).

## See Further with Thermal

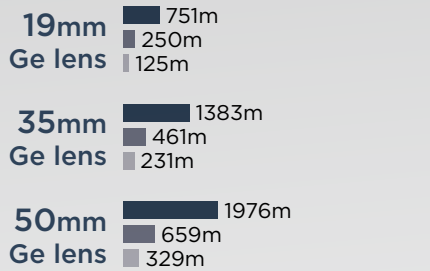
An optional thermal imager lets you see further than any other night vision technology. Unlike traditional color cameras, thermal imaging uses heat rather than light to see objects. Humans, animals, and vehicles are often hot in contrast to most backgrounds, making trespassers hiding in shadows or bushes easy to spot.

## New Thermography Capability

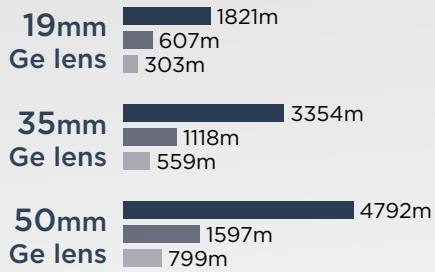
Our new thermography lineup (THO) brings true radiometric capability to a compact, field-proven PTZ platform built around a 640×480 12µm radiometric core that doesn't just detect heat, it measures it. Every pixel delivers a real temperature value, unlocking applications that standard LWIR thermal cameras simply can't address; industrial inspection, equipment monitoring, fire detection, and process temperature verification.

Paired with the Rogue's visible module lineup, spanning from high resolution wide-angle to long-range zoom, operators get a fully configurable dual-sensor system that can be tailored to the application. Additional distance data can be acquired with optional Laser Range Finders. The result is a compact platform that delivers quantitative thermal intelligence alongside high-resolution visible imaging, purpose-built for operators who need more than a picture of heat.

### Human DRI:




### Vehicle DRI:




DETECTION*
RECOGNITION*
IDENTIFICATION*

*DRI detection ratings are based on industry-wide standards (Johnson's Criteria) that can be misleading if not properly understood. For more information, please see our whitepaper about understanding DRI measurements at: www.infinitioptics.com/dri

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# Additional Features and Options

## Customized Rapid Deployment Kits

Our Rapid Deployment Kits allow for safe transportation and ultra fast setup and operation of Infiniti surveillance PTZs. RDKs can be customized for a wide variety of applications including basic configurations for transport cases only or a fully customized remote control kit with an integrated monitor, NVR/ server for recording, WiFi/4G connectivity, tripods, and battery backups.


OCTAGON ENABLED ✓

Infiniti's Octagon platform provides a unified API for integration with third party C2/VMS softwares, radar slew-to-cue, and our network-based PTZ control accessories.

## Vibration Mount

The Rogue can be ordered with a heavy duty wire rope vibration mount for mobile applications. This provides increased vibration isolation compared to standard rubber vibration mounts.

## Magnetic Mount

Open up a world of possibilities for mounting the Rogue in the perfect position at a moment's notice. The built-in magnetic mount offers more flexibility with the option to quickly mount on a vehicle, tripod plate, or other metal surface with no tools or screws required for setup. The powerful magnets make the Rogue quick and easy to install and adjust for optimal positioning.


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# Visible Camera Options

INFINITI ELECTRO-OPTICS

| | | 4MP 30X | 8MP 20X | 4MP 24X | 2MP 30X | 8MP 8X | 12MP 3X Wide Angle** |
|---|---|---|---|---|---|---|---|
| Simulated FOV @ 1km | |  |  |  |  |  |  |
| Pixels Per Meter @ 1km | | 72ppm | 66ppm | 60ppm | 50ppm | 27.5ppm | 9.4ppm |
| DORI | D: 25ppm | 2,873m Detection | 2,640m Detection | 2,394m Detection | 1,982m Detection | 1,101m Detection | 390m Detection |
| | O: 62ppm | 1,158m Observation | 1,065m Observation | 965m Observation | 799m Observation | 444m Observation | 157m Observation |
| | R: 125ppm | 575m Recognition | 528m Recognition | 479m Recognition | 396m Recognition | 220m Recognition | 78m Recognition |
| | I: 250ppm | 287m Identification | 264m Identification | 239m Identification | 198m Identification | 110m Identification | 39m Identification |
| Output Resolution | | 4MP @ 30fps (2688×1520) | 4K @ 30fps (3840×2160) | 4MP @ 30fps (2688×1520) | 1080p @ 30fps (1920×1080) | 4K @ 30fps (3840×2160) | 12MP @ 20fps (4000×3000) |
| Image Sensor | | 4.1 Megapixel 1/2.9" CMOS | 8.4 Megapixel 1/1.8" W CMOS | 4.1 Megapixel 1/2.9" CMOS | 2.4 Megapixel 1/2.8" CMOS | 8.4 Megapixel 1/2.8" CMOS | 12.9 Megapixel 1/2.3" CMOS |
| Lens* | Focal Length | 4.7–141mm | 6.6–132mm | 5–120mm | 4.8–144mm | 5–40mm | 3.9–14.5mm |
| | Optical Zoom | 30X Optical Zoom × 16X Digital Zoom | 20X Optical Zoom × 16X Digital Zoom | 24X Optical Zoom × 16X Digital Zoom | 30X Optical Zoom × 16X Digital Zoom | 8X Optical Zoom × 16X Digital Zoom | 3.5X Optical Zoom × 16X Digital Zoom |
| | Angle of View | 67.9°–2.14° Horizontal | 62.5°–3.3° Horizontal | 56.6°–2.57° Horizontal | 60.3°–2.22° Horizontal | 58.3°–8.0° Horizontal | 74.6°–24.0° Horizontal |
| | 1080p Equiv.† | 42X, 1.53° HFOV | 40X, 1.65° HFOV | 33X, 1.84° HFOV | 30X, 2.22° HFOV | 16X, 4.0° HFOV | 7X, 11.5° HFOV |
| | Focus | Auto/Manual | Auto/Manual/Semi-Auto | Auto/Manual | Auto/Manual | Auto/Manual/Semi-Auto | Auto/Manual/Semi-Auto |
| Minimum Illumination | | Color: 0.005 Lux @ ƒ/1.5; B&W: 0.0005 Lux @ ƒ/1.5 | Color: 0.01 Lux @ ƒ/1.5; B&W: 0.001 Lux @ ƒ/1.5 | Color: 0.005 Lux @ ƒ/1.5; B&W: 0.0005 Lux @ ƒ/1.5 | Color: 0.005 Lux @ ƒ/1.5; B&W: 0.0005 Lux @ ƒ/1.5 | Color: 0.01 Lux @ ƒ/1.5; B&W: 0.001 Lux @ ƒ/1.5 | Color: 0.5 Lux @ ƒ/2.4; No dedicated B&W low-light |
| Optical Fog Filter (NIR) | | No | No | No | No | No | No |
| Heatwave Mitigation | | No | Optional | No | No | No | No |
| NDAA Compliant | | Yes | Yes | Yes | Yes | Yes | Yes |
| Video Network | Compression | H.265/H.264/MJPEG | | | | | |
| | Protocol | ONVIF, HTTP, RTSP, RTP, TCP, UDP | | | | | |
| Image Stabilization | | Electronic Image Stabilization (EIS) | | | | None | EIS |
| Image Enhancements | | Auto White Balance, WDR, 2D/3D DNR, BLC, HLC, Digital Defog | | | | | |
| Edge Storage | | Supports MicroSD Card up to 256GB | | | | | |

*Lens measurements and angle of view are accurate to ±10% due to back focus distances, sensor sizes, lens manufacturing, etc. **Note that the 12MP 3X Wide Angle camera option does not work with IR or ZLID illumination. †Zoom ratio and FOV equivalent if zooming into a 1080p crop of the video output.

# ZLID™/IR Illumination Options

| | 80m IR | 180m ZIR | 180m ZWL | 500m ZLID | 500m Stealth* ZLID | 750m ZLID | 750m Stealth* ZLID |
|---|---|---|---|---|---|---|---|
| Illumination Distance | 80m | 180m | 180m | 500m | 500m | 750m | 750m |
| Wavelength | 808nm | 808nm | White Light | 808nm | 940nm | 808nm | 940nm |
| NOHD | 0m (eye safe at any distance) | | | 18.4m | 13.6m | 26m | 17.5m |

*808nm IR light is invisible to the human eye, however the light source will still be visible as a faint red dot. Our optional 940nm "Stealth" ZLID offers covert illumination that is completely invisible to the human eye, with no red glow visible even at the light source.

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# Thermal Camera Options

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| Surveillance | | 9TI | | | 13TI | | | 19TI | | | 25TI | | | 35TI** | | | 50TI** | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Image Sensor | | Uncooled Vanadium Oxide (VOx) Microbolometer, 30Hz or 9Hz upon request | | | | | | | | | | | | | | | | | |
| Resolution | | 640×512 or 1280×1024 pixels | | | | | | | | | | | | | | | | | |
| Pixel Pitch | | 12µm (Over 200% further range than 25µm sensors, 40% further range than 17µm sensors) | | | | | | | | | | | | | | | | | |
| Lens | | 9mm ƒ/1.0 | | | 13mm ƒ/1.0 | | | 19mm ƒ/1.0 | | | 25mm ƒ/1.0 | | | 35mm ƒ/1.0 | | | 50mm ƒ/1.0 | | |
| Focus | | Athermalized | | | | | | | | | | | | | | | | | |
| Field of View | 640×512 | 46.2° Horizontal FOV | | | 32.9° Horizontal FOV | | | 22.9° Horizontal FOV | | | 17.5° Horizontal FOV | | | 12.5° Horizontal FOV | | | 8.78° Horizontal FOV | | |
| | 1280×1024† | 81° Horizontal FOV† | | | 61.1° Horizontal FOV† | | | 44° Horizontal FOV† | | | 34.2° Horizontal FOV† | | | 24.8° Horizontal FOV† | | | 17.46° Horizontal FOV† | | |
| Human DRI Ratings* | | 356 m | 119 m | 59 m | 514 m | 171 m | 86 m | 751 m | 250 m | 125 m | 988 m | 329 m | 165 m | 1,383 m | 461 m | 231 m | 1,976 m | 659 m | 329 m |
| Vehicle DRI Ratings* | | 863 m | 288 m | 144 m | 1,246 m | 415 m | 208 m | 1,821 m | 607 m | 303 m | 2,396 m | 799 m | 399 m | 3,354 m | 1,118 m | 559 m | 4,792 m | 1,597 m | 799 m |
| Spectral Range | | 8,000–14,000nm (LWIR) | | | | | | | | | | | | | | | | | |
| Thermal Sensitivity | | 20–35mK | | | | | | | | | | | | | | | | | |
| Image Display Modes | | White Hot, Black Hot, Red Hot, other color palettes available upon request | | | | | | | | | | | | | | | | | |

**Focal lengths and FOVs are within ±5%. **35mm or 50mm thermal lenses may not possible with some payload combinations. Please contact Infiniti for details. †HD sensor option coming soon.**

* D R I While DRI ratings are based on the industry-standard Johnson's Criteria, they represent theoretical maximums under ideal conditions that typically exceed real-world performance. Additionally, a "Detection" rating means that a target will appear only as a tiny speck of pixels, rather than as a clearly defined or recognizable object. For more info, please see our whitepaper about understanding DRI at: www.infinitioptics.com/dri

| Thermography | 5THO | | | 9THO | | | 18THO | | |
|---|---|---|---|---|---|---|---|---|---|
| Image Sensor | Microbolometer | | | | | | | | |
| Resolution | 640×480 pixels | | | | | | | | |
| Pixel Pitch | 12µm (Over 200% further range than 25µm sensors, 40% further range than 17µm sensors) | | | | | | | | |
| Lens | 4.9mm ƒ/1.0 | | | 8.7mm ƒ/1.0 | | | 18mm ƒ/1.0 | | |
| Field of View | 95° Horizontal FOV | | | 50.8° Horizontal FOV | | | 24° Horizontal FOV | | |
| Human DRI Ratings* | 194 m | 65 m | 32 m | 344 m | 115 m | 57 m | 712 m | 237 m | 119 m |
| Vehicle DRI Ratings* | 470 m | 157 m | 78 m | 834 m | 278 m | 139 m | 1,725 m | 575 m | 288 m |
| Spectral Range | 8,000–14,000nm (LWIR) | | | | | | | | |
| Thermal Sensitivity | 50mK | | | | | | | | |

**Focal lengths and FOVs are within ±5%.**

## Optional Laser Rangefinder

| | LRF4 | LRF7 | LRF20 | LRF21 |
|---|---|---|---|---|
| Extended Range | 4.2km | 7.1km | 20km | 21km |
| Range to NATO Vehicle* | 3.5km | 6km | 8km | 10km |
| Range to Human* | 2km | 3.8km | 4km | 5km |
| Wavelength | 1530nm (±5) | | | |
| Precision** | 0.1–1.5m | | 0.2–2.5m | |

**Some options may not be available depending on configuration. *Range performance is dependent on distance and target reflectivity. Calculated using NATO Vehicle size of 2.3×2.3m, Human size of 0.5×1.8m, with target visibility 25km, maximum measuring time, target reflectivity 30%, detection probability 90%. Depending on received signal level. Up to three (3) targets: First, Second and Third. See our LRF brochure for more information **LRF accuracy is based on ideal conditions. See our LRF brochure for more information.**

## Additional System Specifications

| Pan/Tilt Mechanical | |
|---|---|
| Pan Angle & Speed | 360° Continuous, up to 90°/sec (may be limited by configuration) |
| Tilt Angle & Speed | –30° to +90°, up to 30°/sec (may be limited by configuration) |
| Absolute Positioning | Available via RS485/Pelco-D and Octagon HTTP API |
| **Physical** | |
| Construction | High Strength Aluminum Alloy (optional anti-corrosive coating) |
| Weight | < 4.8kg (without vibration mount) |

| Environmental | |
|---|---|
| Operational Temperature | 0°C to +65°C, <90% Relative Humidity (-30°C to +65°C optional) |
| Environmental | IP66 Weatherproof Housing |
| **Electrical** | |
| Input Voltage | 12VDC |
| Power Consumption | Max 60W (will change depending on configuration) |

***Specifications subject to change due to global supply chain constraints and material availability.***

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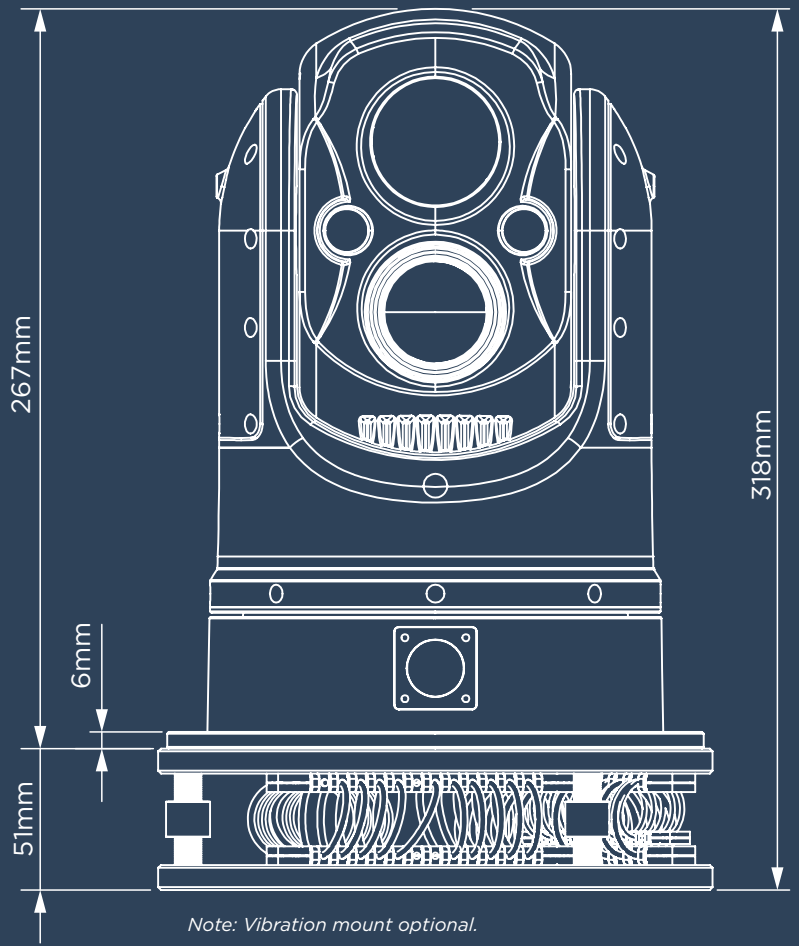
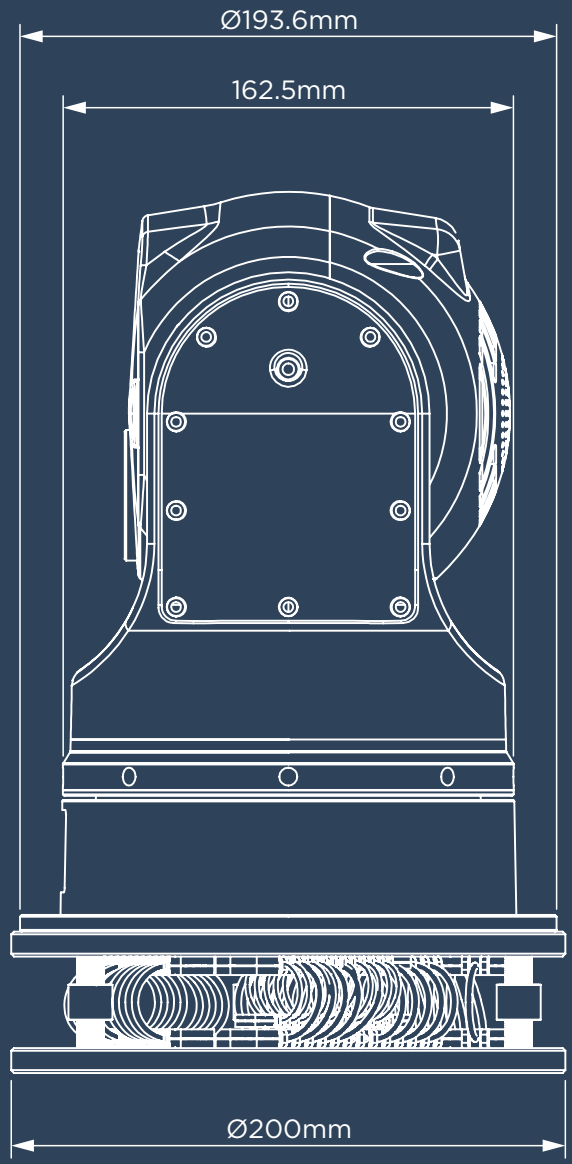
# Dimensions

INFINITI ELECTRO-OPTICS




*Note: Vibration mount optional.*

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