

ROGUE

Rugged, Mobile Surveillance

INFINITI

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



5mm-
40
8X 8MP

5mm-
120
24X 4MP

6.6mm-
132
20X 8MP

4.7mm-
141
30X 4MP

4.8mm-
144
30X 2MP

Multiple Zoom
Lens Options
up to 144mm

180m

500m
ZLID™

750m
ZLID™

Optional IR
Illumination
up to 750m

25 mm
LWIR

35 mm
LWIR

50 mm
LWIR

Optional Thermal
Imaging

4.2km

7.1km

21km

Optional LRF
up to 21km
Ext. Range

Appearance
will vary
based on
configuration
options.



Advanced
Control



Rugged
& Mobile
Ready



IP66
Weatherproof
with Military
Connectors



Remote Pan/
Tilt/Zoom
Control



View the Rogue on our website:

THE ROGUE'S Day and Night Vision Options



Thermal Image

ZLID Image

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

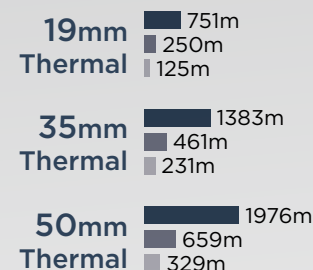
An optional thermal imager lets you see further than any other night vision technology. Unlike traditional color cameras, thermal imaging uses heat rather than light to see objects. Humans, animals, and vehicles are often hot in contrast to most backgrounds, making trespassers hiding in shadows or bushes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

New Thermography Capability

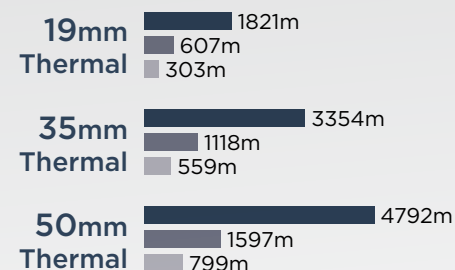
Our new thermography lineup (THO) brings true radiometric capability to a compact, field-proven PTZ platform built around a 640×480 12μm radiometric core that doesn't just detect heat, it measures it. Every pixel delivers a real temperature value, unlocking applications that standard LWIR thermal cameras 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

THE ROGUE'S 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.



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.



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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.



ROGUE

Visible Camera Options



		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 (2688x1520)	4K @ 30fps (3840x2160)	4MP @ 30fps (2688x1520)	1080p @ 30fps (1920x1080)	4K @ 30fps (3840x2160)	12MP @ 20fps (4000x3000)
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 x 16X Digital Zoom	20X Optical Zoom x 16X Digital Zoom	24X Optical Zoom x 16X Digital Zoom	30X Optical Zoom x 16X Digital Zoom	8X Optical Zoom x 16X Digital Zoom	3.5X Optical Zoom x 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 @ f/1.5; B&W: 0.0005 Lux @ f/1.5	Color: 0.01 Lux @ f/1.5; B&W: 0.001 Lux @ f/1.5	Color: 0.005 Lux @ f/1.5; B&W: 0.0005 Lux @ f/1.5	Color: 0.005 Lux @ f/1.5; B&W: 0.0005 Lux @ f/1.5	Color: 0.01 Lux @ f/1.5; B&W: 0.001 Lux @ f/1.5	Color: 0.5 Lux @ f/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.

ROGUE

Thermal Camera Options



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 f/1.0	13mm f/1.0	19mm f/1.0	25mm f/1.0	35mm f/1.0	50mm f/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
	1280×1024†	81° Horizontal FOV†	61.1° Horizontal FOV†	44° Horizontal FOV†	34.2° Horizontal FOV†	24.8° Horizontal FOV†
Human DRI Ratings*	356m	119m	59m	514m	171m	86m
Vehicle DRI Ratings*	863m	288m	144m	1,246m	415m	208m
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 be 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.infinitiioptics.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 f/1.0	8.7mm f/1.0	18mm f/1.0
Field of View	95° Horizontal FOV	50.8° Horizontal FOV	24° Horizontal FOV
Human DRI Ratings*	194m	65m	32m
Vehicle DRI Ratings*	470m	157m	78m
Spectral Range	8,000–14,000nm (LWIR)		
Thermal Sensitivity	50mK		

Focal lengths and FOVs are within ±5%.

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.

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	
Lifetime MTBF†	1500 hours		1 million single measurements	

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. See our LRF brochure for more information **LRF accuracy is based on ideal conditions. See our LRF brochure for more information. †Based on assumptions.

ROGUE Dimensions

