TRITON

Rugged, Mobile Surveillance

The Triton is a small, rugged portable PTZ camera featuring various visible sensor options with up to 30X day/night zoom and resolutions up to 12 Megapixels. This compact unit packs both wide-angle and long-range imaging capabilities, and optional thermal imaging allows for advanced detection of humans and vehicles, even in complete darkness.

All of this comes in a rugged aluminum weather-ready enclosure, making the Triton an excellent choice for marine and vehicle deployments for police, navy, militaries and more around the world.

Key Features:

- Single-Sensor or Multi-Sensor Integrated PTZ System
- Impressive Visible Zoom Options from 3X to 30X
- Optical Field of View Options from 74° to 2.2°
- 12µm 640×480 VOx Uncooled Thermal Imager or Optional 384×288 or 1024×768 Resolution
- Active IR LED for 50m of Covert Illumination
- Rugged Mobile-Ready Design
- Military Connector Supplies Video, Power and Telemetry Over a Single Cable
- Rugged IP66 and −40° to +65°C Weather Resistance

Optional Features:

- Magnetic Mount
- Vibration Mount
- Nano Coating for Viewing Window
- GPS & 4G Cellular Transmission
- Integrated Internal Storage

THE TRITON'S

Visible/NIR and Thermal Cameras

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VIS/NIR Optical Camera

Infiniti's VIS/NIR zoom cameras utilize high-end CMOS sensors to offer excellent spectral sensitivity in the visible 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 a range of focal lengths with 3X up to 30X optical zoom and integrated rapid autofocus to allow for long-range surveillance of targets without operator intervention or wide angle situational awareness.

IR LED Array Night Vision

The Triton's LED arrays provide up to 50m (160ft) of IR illumination. The LEDs have integrated optical collimators that shape the IR light to eliminate hot spots and washouts, resulting in a more consistent and even illumination and ensuring 24/7 day night imaging even in complete darkness.

The Triton can also be customized with white light LEDs, or military-grade 940nm "stealth" IR that eliminates the red glow typically present with IR illumination, for more covert surveillance and reconnaissance.

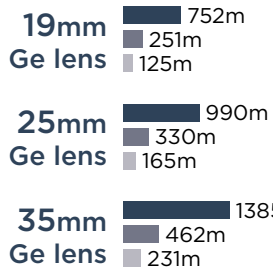
See Further with Thermal

An optional thermal imager lets you see further than any other night vision technology. Unlike traditional visible cameras, thermal imaging uses heat rather than light to see objects. Humans, animals, and vehicles are hot in contrast to most backgrounds, making trespassers hiding in shadows or bushes easy to spot. Thermal images are also unaffected by bright light and have the ability to see through atmospheric obstructions such as smoke, dust, and light fog. This makes it an ideal technology for many applications, including surveillance and security, search and rescue, fire, marine and land navigation, wide area situational assessment and much more.

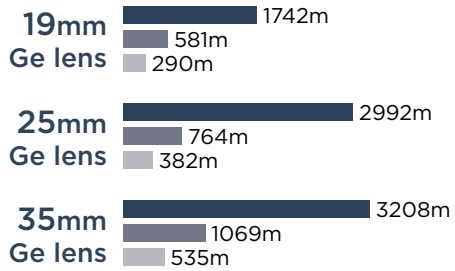
12µm VOx Thermal Imager

The Triton's LWIR sensor options use a cutting-edge 12µm VOx uncooled sensor, giving the camera a narrower field of view without changing the lens. The smaller 12µm pixel pitch achieves a 40% further range than 17µm sensors or 200% further range than older 25µm sensors. The high-sensitivity sensor detects differences in temperature as small as ±0.05°C, and its no-maintenance VOx design, unlike other thermal cores, is self healing and resistant to solar damage.

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.

These kits are an excellent rapid deployment solution for military, law enforcement and other applications where every minute counts.

Battery Power

An optional battery can provide 6 to 8 hours of remote viewing and control on a single charge for completely wire-free operation.

Wireless Connectivity

Optional WiFi connectivity allows the camera to be viewed and controlled over a wireless network connection for quick deployment and use without requiring a cable installation.

Magnetic Mount

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

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Visible Camera Options

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		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)	8MP/4K @ 30fps (3840×2160)	4MP @ 30fps (2688×1520)	2MP/1080p @ 30fps (1920×1080)	8MP/4K @ 30fps (3840×2160)	12MP/4K @ 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	20X Optical Zoom × 16X Digital	24X Optical Zoom + 16X Digital	30X Optical Zoom + 16X Digital	8X Optical Zoom + 16X Digital	3.5X Optical Zoom + 16X Digital
	Angle of View	67.9°–2.14° Horizontal (0.54° with 4X Digital Zoom)	62.5°–3.3° Horizontal	56.6°–2.57° Horizontal (0.64° with 4X Digital Zoom)	69.8°–2.22° Horizontal (0.56° with 4X Digital Zoom)	58.3°–8.0° Horizontal (1.0° with 8X Digital Zoom)	74.6°–24.0° Horizontal (3.0° with 8X Digital Zoom)
	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; B&W: 0.05 Lux @ f/2.4
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)					
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.

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Thermal Camera Options

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		4mm			6mm			13mm			19mm			25mm**			35mm**		
Image Sensor		Uncooled Vanadium Oxide (VOx) Microbolometer, 30Hz or 9Hz upon request																	
Resolution		384×288, 640×512 or 1280×1024 pixels																	
Pixel Pitch		12µm (Over 200% further range than 25µm sensors, 40% further range than 17µm sensors)																	
Lens		4mm f/1.2			5.75mm f/1.2			25mm f/1.2			19mm f/1.0			25mm f/1.0			35mm f/1.0		
Focus		Athermalized																	
Field of View	384×288	59.9° Horizontal FOV			49.5° Horizontal FOV			20.1° Horizontal FOV			13.8° Horizontal FOV			10.5° Horizontal FOV			7.53° Horizontal FOV		
	640×512	87.7° Horizontal FOV			75° Horizontal FOV			32.9° Horizontal FOV			22.9° Horizontal FOV			17.5° Horizontal FOV			12.5° Horizontal FOV		
	1280×1024	125° Horizontal FOV			114° Horizontal FOV			61.1° Horizontal FOV			44° Horizontal FOV			34.2° Horizontal FOV			24.8° Horizontal FOV		
Human DRI Ratings*		158m	53m	26m	228m	76m	38m	515m	172m	86m	752m	251m	125m	990m	330m	165m	1,385m	462m	231m
Vehicle DRI Ratings*		367m	122m	61m	527m	176m	88m	1,192m	397m	199m	1,742m	581m	290m	2,292m	764m	382m	3,208m	1,069m	535m
Spectral Range		7,000–14,000nm (LWIR)																	
Thermal Sensitivity		50mK																	
Image Display Modes		White Hot																	

** 25mm & 35mm thermal lens options can not be combined with a visible light camera, these Triton models will have thermal imaging only.

* D R I 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

Additional System Specifications

Pan/Tilt Mechanical	
Pan Angle & Speed	360° Continuous, up to 80°/sec
Tilt Angle & Speed	-25° to +90°, up to 60°/sec
Absolute Positioning	Not supported
Physical	
Construction	High Strength Aluminum Alloy w/anti-corrosive coating
Weight	<2.8kg (will change depending on configuration)
Environmental	
Operational Temperature	-40°C to +65°C
Environmental	IP66 Weatherproof Housing
Electrical	
Input Voltage	12VDC
Power Consumption	<20W (will change depending on configuration)

Brochure specifications subject to change.

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Dimensions

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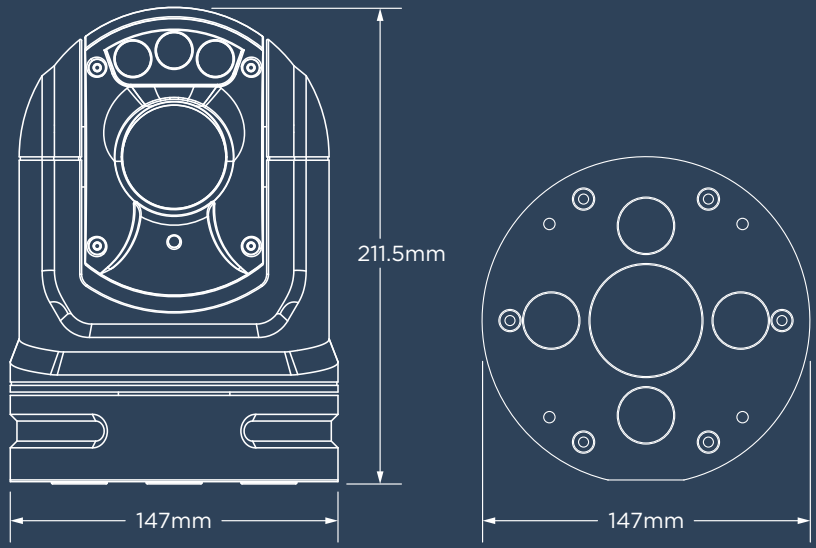
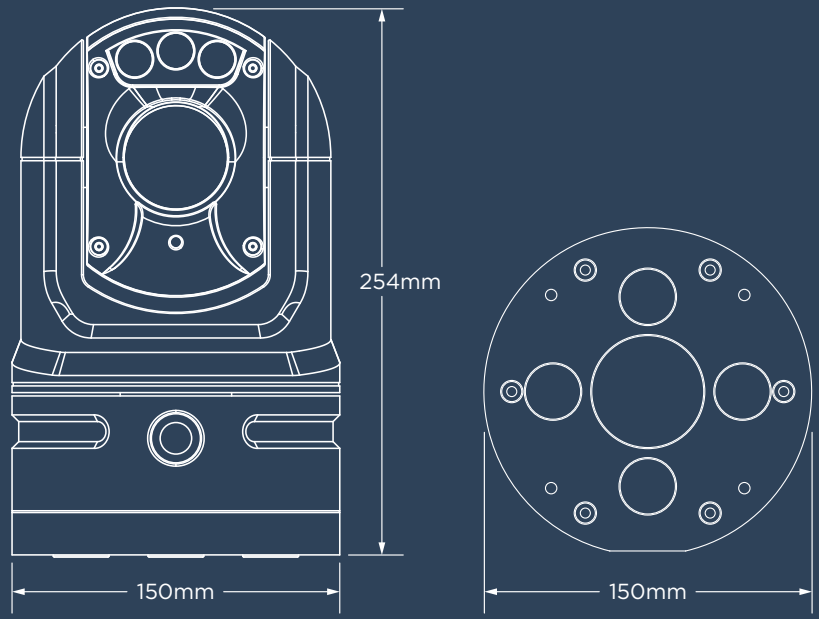


STANDARD TRITON



BATTERY TRITON

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