

ATLAS

# Rugged, Mobile Surveillance

INFINITI

The Atlas is a portable all-weather PTZ camera system featuring an impressive slate of day/night zoom camera options with both wide-angle and long-range imaging capabilities and 2 Megapixel or 8 Megapixel (4K) high resolution sensors. Night vision capabilities can be added with thermal sensors rated for up to 6km of detection or ZLID™/IR LED illumination which allows for HD nighttime performance up to 750m in complete darkness.

All of this comes in a rugged aluminum weather or marine-ready enclosure, with powerful PTZ capabilities, making the Atlas an excellent choice for marine and vehicle deployments by police, navy, militaries and more around the world.

## Key Features:

- › Single-Sensor or Multi-Sensor Integrated PTZ System
- › 2MP HD or 8MP 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 384×288 or 1024×768 Thermal Resolutions
- › Active IR LED Illumination for 150m of Night Vision or Optional ZLID Illumination for up to 750m of Night Vision
- › Rugged Mobile-Ready Design
- › Military Connector Supplies Video, Power and Telemetry Over a Single Cable
- › Rugged IP67 and -40° to +65°C Weather Resistance

## Optional Features:

- › Magnetic Mount
- › Vibration Mount
- › Internal Storage
- › GPS, WiFi, 4G Cellular Transmission
- › 940nm “Stealth” ZLID Illumination
- › Nano Coating for Viewing Window



4.8mm-  
**144**  
30X 2MP

**13**  
mm  
LWIR

5mm-  
**120**  
24X 4MP



**19**  
mm  
LWIR

6.6mm-  
**132**  
20X 8MP



**25**  
mm  
LWIR

4.7mm-  
**141**  
30X 4MP



**35**  
mm  
LWIR

6mm-  
**180**  
30X 8MP



**55**  
mm  
LWIR



Rugged  
& Mobile  
Ready

Remote Pan/  
Tilt/Zoom  
Control



**IP67**  
Waterproof  
with Military  
Connectors

Multiple Zoom  
Lens Options  
up to 180mm

Optional IR  
Illumination  
up to 750m

Optional  
Thermal  
Imaging

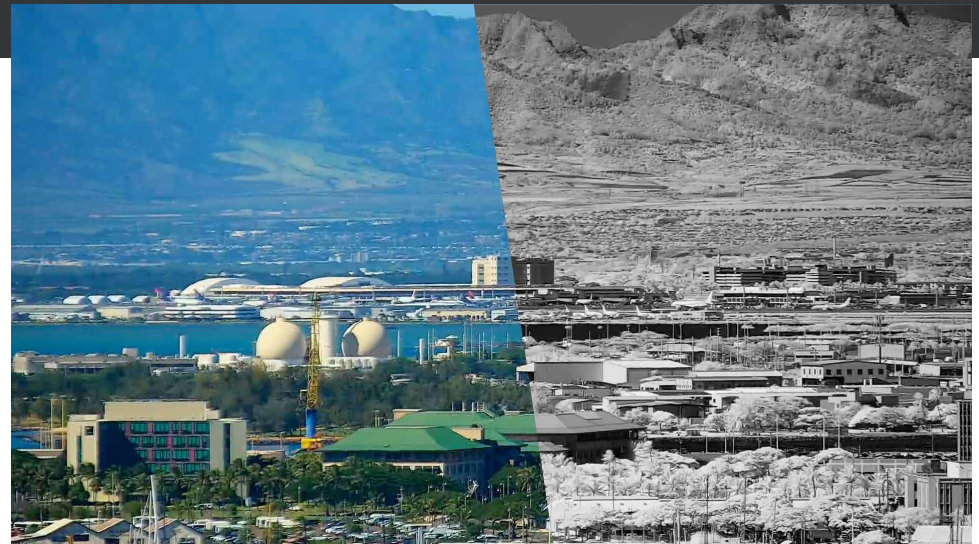
View the Atlas on our website:



# Visible/NIR HD Zoom Camera

## 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 (HD/1080p) to 8MP (UHD/4K).



**Standard Color Visible Image**  
(Optical Fog Filter Disabled)

**NIR Image**  
(Optical Fog Filter Enabled)

## Continuous Zoom Lenses

The Atlas's precision engineered IR-corrected zoom lenses are built with high quality optical glass and feature integrated rapid auto focus. We offer a wide 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.

## Optical Fog Filter (NIR Only Mode)

While all of our sensors offer a nighttime NIR + visible mode for optimized sensitivity in low light, the optional 2MP 36X camera features a NIR bandpass filter (also referred to as a "fog filter") to isolate the NIR (near-infrared) wavelength of light during the day for clearer long-range daytime imaging.

Long-range imaging needs to see through large amounts of atmosphere which often contains particulates like smoke, haze/fog, and other atmospheric distortions. Cutting out the visible wavelength and isolating the NIR can mitigate the effects of smoke, haze and light fog, producing an image with better contrast and less distortion. The 2MP 36X lens option incorporates a motorized filter that is used with the camera's monochrome mode and de-haze image processing to see through smoke, smog and haze.



NIGHT VISION OPTIONS

# ZLID™ Illumination or Thermal Imaging



Thermal Image



ZLID Image

## See in the Dark with ZLID™

IR illumination allows for detailed HD video when there isn't enough natural light, however common IR LED illuminators have very limited ranges. For long-range illumination, a laser is needed. Many laser illuminators overexpose the center of the screen and leave the edges dark. Infiniti's ZLID (Zoom Laser IR Diode) technology synchronizes the IR intensity and area illumination with the zoom lens for outstanding active IR performance, eliminating over-exposure, washout, and hot-spots for clear images in complete darkness.

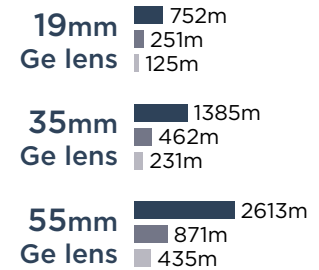
Our optional 940nm "Stealth" ZLID offers covert illumination that is completely invisible to the human eye, with no red glow visible even at the light source (an 808nm IR illuminator will still have a visible red glow at the light source).

## See Further with Thermal

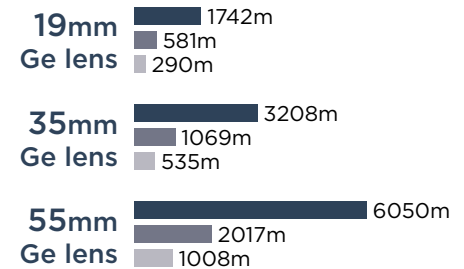
Optional thermal imaging lets you see further than any other night vision technology. Unlike traditional visible cameras, thermal imaging uses radiated heat rather than reflected light to see objects. Humans, animals, and vehicles are warmer in contrast to most backgrounds, making trespassers hiding in shadows or bushes easy to spot. Thermal images are also unaffected by bright lights 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 more.

The Atlas'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](http://www.infinitioptics.com/dri)

# Visible Camera Options

		8MP 30X	4MP 30X	8MP 20X	4MP 24X	2MP 30X	12MP 3X Wide Angle
Simulated FOV @ 1km							
Pixels Per Meter @ 1km		90ppm	72ppm	66ppm	60ppm	50ppm	9.4ppm
DORI	D: 25ppm	3,600m Detection	2,873m Detection	2,640m Detection	2,394m Detection	1,982m Detection	390m Detection
	O: 62ppm	1,452m Observation	1,158m Observation	1,065m Observation	965m Observation	799m Observation	157m Observation
	R: 125ppm	720m Recognition	575m Recognition	528m Recognition	479m Recognition	396m Recognition	78m Recognition
	I: 250ppm	360m Identification	287m Identification	264m Identification	239m Identification	198m Identification	39m Identification
Output Resolution		8MP/4K @ 30fps (3840x2160)	4MP @ 30fps (2688x1520)	8MP/4K @ 30fps (3840x2160)	4MP @ 30fps (2688x1520)	2MP/1080p @ 30fps (1920x1080)	12MP/4K @ 20fps (4000x3000)
Image Sensor		8.4 Megapixel 1/1.8" W CMOS	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	12.9 Megapixel 1/2.3" CMOS
Lens*	Focal Length	6-180mm	4.7-141mm	6.6-132mm	5-120mm	4.8-144mm	3.9-14.5mm
	Optical Zoom	30X Optical Zoom + 16X Digital	30X Optical Zoom + 16X Digital	20X Optical Zoom x 16X Digital	24X Optical Zoom + 16X Digital	30X Optical Zoom + 16X Digital	3.5X Optical Zoom + 16X Digital
	Angle of View	65.2°-2.44° Horizontal (0.3° with 8X Digital Zoom)	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)	74.6°-24.0° Horizontal (3.0° with 8X Digital Zoom)
	Focus	Auto / Manual	Auto/Manual	Auto/Manual/Semi-Auto	Auto/Manual	Auto/Manual	Auto/Manual/Semi-Auto
Minimum Illumination		Color: 0.1 Lux @ f/1.5; B&W: 0.01 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: 0.005 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: 0.5 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	No	Optional	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.

## ZLID™/IR Illumination Options

	150m IR	300m ZLID	500m ZLID	500m Stealth* ZLID	750m ZLID	750m Stealth* ZLID
Illumination Distance	150m	300m	500m	500m	750m	750m
Wavelength	808nm	808nm	808nm	940nm	808nm	940nm
NOHD	0m (eye safe at any distance)	15m	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.

# Thermal Camera Options

	9mm	13mm	19mm	25mm	35mm	55mm												
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	9mm f/1.2	25mm f/1.2	19mm f/1.0	25mm f/1.0	35mm f/1.0	55mm f/1.0												
Focus	Athermalized																	
Field of View	384×288	28.7° Horizontal FOV	20.1° Horizontal FOV	13.8° Horizontal FOV	10.5° Horizontal FOV	7.53° Horizontal FOV	4.80° Horizontal FOV											
	640×512	46.2° Horizontal FOV	32.9° Horizontal FOV	22.9° Horizontal FOV	17.5° Horizontal FOV	12.5° Horizontal FOV	7.99° Horizontal FOV											
	1280×1024	81° Horizontal FOV	61.1° Horizontal FOV	44° Horizontal FOV	34.2° Horizontal FOV	24.8° Horizontal FOV	15.9° Horizontal FOV											
Human DRI Ratings*	356m	119m	59m	515m	172m	86m	752m	251m	125m	990m	330m	165m	1,385m	462m	231m	2,613m	871m	435m
Vehicle DRI Ratings*	825m	275m	138m	1,192m	397m	199m	1,742m	581m	290m	2,292m	764m	382m	3,208m	1,069m	535m	6,050m	2,017m	1,008m
Spectral Range	7,000–14,000nm (LWIR)																	
Thermal Sensitivity	50mK																	
Image Display Modes	White Hot																	

\* **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.infiniitioptics.com/dri](http://www.infiniitioptics.com/dri)

## Additional System Specifications

### Pan/Tilt Mechanical

Pan Angle & Speed	360° Continuous, 0.05°/sec to 50°/sec
Tilt Angle & Speed	-20° to +40°, 0.05°/sec to 50°/sec
Absolute Positioning	Not supported

### Physical

Construction	High Strength Aluminum Alloy (optional anti-corrosive coating)
Weight	6.6kg

### Environmental

Operational Temperature	-40°C to +65°C, <90% Relative Humidity
Environmental	IP67 Weatherproof Housing

### Electrical

Input Voltage	12VDC or 24VDC
Power Consumption	Max 60W (will change depending on configuration)

Brochure specifications subject to change.

ATLAS  
**Dimensions**

