

ATLAS

Rugged, Mobile Surveillance



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 2X to 38X
- › Optical Field of View Options from 70° to 1.18°
- › 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
- › GPS, WiFi, 4G Cellular Transmission
- › Vibration Mount
- › 940nm “Stealth” ZLID Illumination
- › Internal Storage
- › Nano Coating for Viewing Window



13 mm
LWIR

4K

150m

19 mm
LWIR

30X
ZOOM

300m
ZLID™

25 mm
LWIR

36X
ZOOM

500m
ZLID™

35 mm
LWIR

38X
ZOOM

750m
ZLID™

55 mm
LWIR

Multiple Zoom Lens Options up to 272mm

Optional IR Illumination up to 750m

Optional Thermal Imaging



Rugged & Mobile Ready



Remote Pan/Tilt/Zoom Control



Waterproof with Military Connectors



Visible/NIR HD Zoom Camera

VIS/NIR Optical Camera

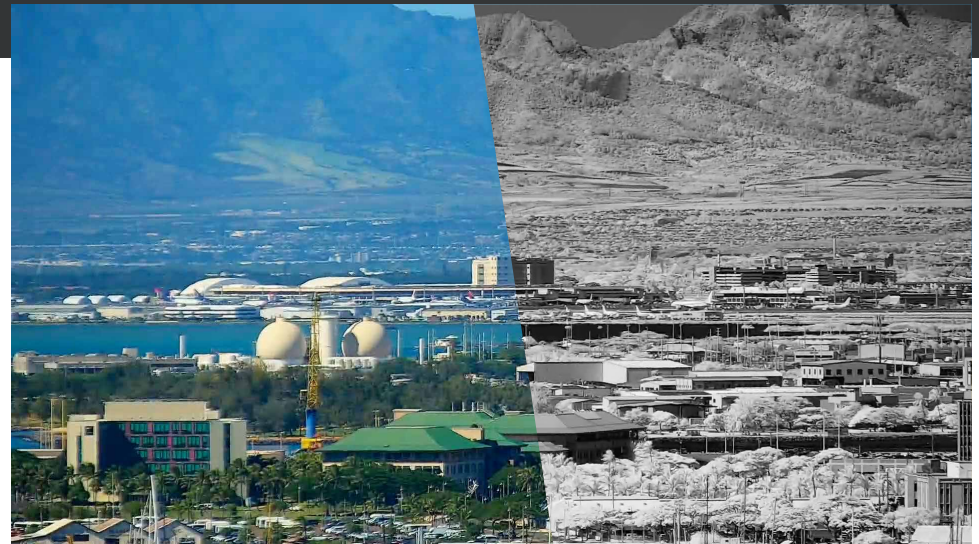
Infiniti's VIS/NIR zoom cameras utilize the visible and near-infrared bands of light to provide high-quality images optimized for long-range surveillance. They are designed to provide industry-leading performance and quality, with image resolutions ranging from 2MP (HD/1080p) to 8MP (UHD/4K).

Sensors

The Sony progressive scan CMOS sensors offer excellent spectral sensitivity for both visible and NIR wavelengths. We use various sensor sizes depending on the application. Our 1/2.8" sensor is often selected for maximum range as the smaller sensor maximizes the long-range zoom capabilities of the camera, while still offering good low-light performance. Our 1/2" and larger sensors offer superior low-light performance and increase the effectiveness of our ZLID™ illumination.

Continuous Zoom Lenses

The Atlas's precision engineered IR-corrected zoom lenses offer a wide range of focal lengths with zoom factors from 2X up to 38X optical zoom. Infiniti's zoom optics are built with the highest quality Japanese fluorite ELD low dispersion glass, and the integrated rapid auto focus allows long-range surveillance of targets without operator intervention.



Standard Color Visible Image
(Optical Fog Filter Disabled)

NIR Image
(Optical Fog Filter Enabled)

Optical Fog Filter (NIR Only Mode)

While all of our sensors offer a nighttime NIR+visible mode for optimized sensitivity in low light, the 2MP 36X camera option features our 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.

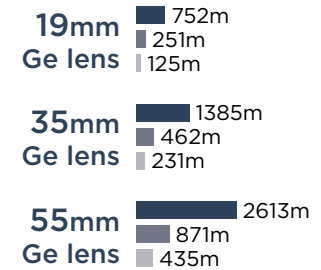
Our optional 940nm "Stealth" ZLID offers covert illumination that is completely invisible to the human eye, with no red glow visible even at the light source (an 808nm IR illuminator will still have a visible red glow at the light source).

See Further with Thermal

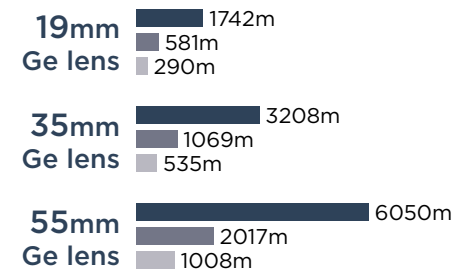
Optional thermal imaging lets you see further than any other night vision technology. Unlike traditional visible cameras, thermal imaging uses radiated heat rather than reflected light to see objects. Humans, animals, and vehicles are warmer in contrast to most backgrounds, making trespassers hiding 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



Visible Camera Options

		2MP 38X**	8MP 30X	2MP 36X	2MP 30X	8MP 2X Wide Angle
Output Resolution		2MP @ 30fps (1920×1080)	8MP/4K @ 30fps (3840×2160)	2MP/1080p @ 30fps (1920×1080)	2MP/1080p @ 30fps (1920×1080)	4K @ 30fps (3840×2160)
Pixels Per Meter @ 1km		93ppm	90ppm	58ppm	50ppm	2.1-5.4ppm
Simulated FOV @ 1km						
DORI	D: 25ppm	3,716m Detection	3,600m Detection	2,325m Detection	1,982m Detection	94-214m Detection
	O: 62ppm	1,498m Observation	1,452m Observation	938m Observation	799m Observation	38-86m Observation
	R: 125ppm	743m Recognition	720m Recognition	465m Recognition	396m Recognition	19-43m Recognition
	I: 250ppm	372m Identification	360m Identification	233m Identification	198m Identification	9-21m Identification
Image Sensor		2.4 Megapixel 1/2.8" CMOS	12.4 Megapixel 1/1.8" W CMOS	2.1 Megapixel 1/2" W CMOS	2.4 Megapixel 1/2.8" CMOS	8.4 Megapixel 1/1.8" CMOS
Lens*	Focal Length	7.2-270mm	6-180mm	6-218mm	4.8-144mm	4.4-10mm
	Optical Zoom	38X Zoom	30X Zoom	36X Zoom	30X Zoom	2.2X Zoom
	Angle of View	43.5°-1.18° Horizontal	65.2°-2.44° Horizontal	61.9°-1.89° Horizontal	69.8°-2.22° Horizontal	83.8°-39.5° Horizontal
	Focus	Auto/Manual	Auto/Manual	Auto/Manual	Auto/Manual	Auto/Manual/Semi-Auto
S/N Ratio		≥55dB	≥55dB	≥55dB	≥55dB	≥55dB
Minimum Illumination		Color: 0.005 Lux @ f/1.6; B&W: 0.0005 Lux @ f/1.6	Color: 0.1 Lux; B&W: 0.01 Lux	Color: 0.001 Lux; B&W: 0.0001 Lux	Color: 0.005 Lux; B&W: 0.0005 Lux	Color: 0.1 Lux; B&W: 0.01 Lux
Optical Fog Filter (NIR)		No	No	Yes	No	No
NDAA Compliant		No	Yes	No	Optional	Yes
Video Network	Compression	H.265/H.264/MJPEG	H.265/H.264/MJPEG	H.265/H.264/MJPEG	H.265/H.264/MJPEG	H.265/H.264
	Protocol	ONVIF, HTTP, RTSP, RTP, TCP, UDP				
EIS		Electronic Image Stabilization (On/Off)				
Image Enhancements		Auto White Balance, 2D/3D DNR, Digital Defog		Auto White Balance, 100dB WDR, 2D/3D DNR, BLC, HLC, Digital Defog		Auto White Balance, WDR, 2D/3D DNR, BLC, HLC, Digital Defog
Digital Zoom		4x Digital Zoom	4x Digital Zoom	4x Digital Zoom	4x Digital Zoom	4x Digital Zoom
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. **2MP 38X lens option is only available with the 150m IR illumination option (not available with ZLID or Thermal configurations).

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.

	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 Detection*	356 m / 1,169 ft	515 m / 1,688 ft	752 m / 2,447 ft	990 m / 3,246 ft	1,385 m / 4,544 ft	2,613 m / 8,569 ft	
Human Recognition*	119 m / 390 ft	172 m / 563 ft	251 m / 822 ft	330 m / 1,082 ft	462 m / 1,515 ft	871 m / 2,856 ft	
Human Identification*	59 m / 195 ft	86 m / 281 ft	125 m / 411 ft	165 m / 541 ft	231 m / 757 ft	435 m / 1,428 ft	
Vehicle Detection*	825 m / 2,706 ft	1,192 m / 3,909 ft	1,742 m / 5,713 ft	2,292 m / 7,517 ft	3,208 m / 10,523 ft	6,050 m / 19,844 ft	
Vehicle Recognition*	275 m / 902 ft	397 m / 1,303 ft	581 m / 1,904 ft	764 m / 2,506 ft	1,069 m / 3,508 ft	2,017 m / 6,615 ft	
Vehicle Identification*	138 m / 451 ft	199 m / 651 ft	290 m / 952 ft	382 m / 1,253 ft	535 m / 1,754 ft	1,008 m / 3,307 ft	
Spectral Range	7,000-14,000nm (LWIR)						
Thermal Sensitivity	50mK						
Image Display Modes	White Hot						

* DRI detection ratings are based on industry-wide standards (Johnson's Criteria) that can be misleading if not properly understood. Please see our whitepaper about understanding DRI measurements at: www.infiniioptics.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
Power Loss Recovery	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 52W (will change depending on configuration)

ATLAS

Dimensions

