

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

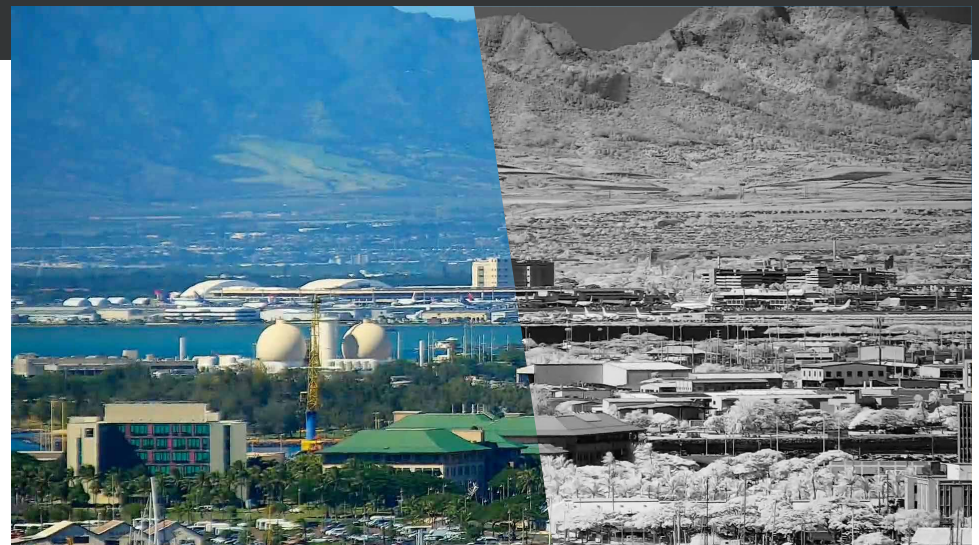
View the Atlas on our website:



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.

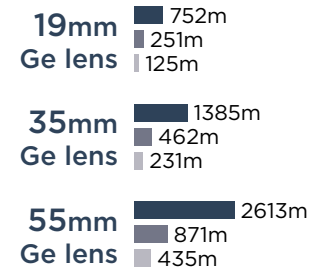
Our optional 940nm "Stealth" ZLID offers covert illumination that is completely invisible to the human eye, with no red glow visible even at the light source (an 808nm IR illuminator will still have a visible red glow at the light source).

See Further with Thermal

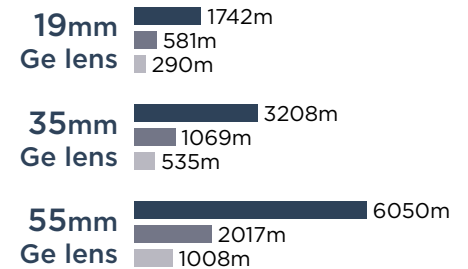
Optional thermal imaging lets you see further than any other night vision technology. Unlike traditional visible cameras, thermal imaging uses radiated heat rather than reflected light to see objects. Humans, animals, and vehicles are warmer in contrast to most backgrounds, making trespassers hiding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

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 | | | | | 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 | - | | | | | | | | | | | | |
| | 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.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 |
| 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

