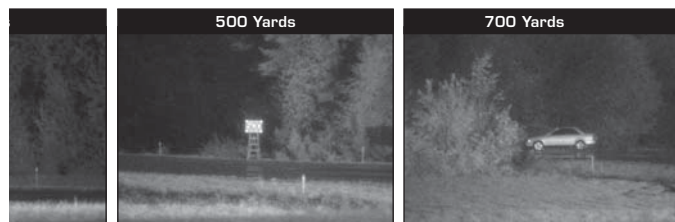


World's
Most Powerful
Illuminator

ALS-40™ Infrared Illuminator

Covert Illuminator for Large Areas



Turn Night Into Day for Near-Infrared CCTV Cameras

The ALS infrared illuminators by Electrophysics are designed for large areas (up to 15 acres) and long-range covert lighting applications. Incorporating a high power laser diode and patented internal optical assembly, the ALS illuminators deliver the highest near infrared light output available while achieving a Class 1 eye safety rating (IEC-60825-1).

A range of fixed beam widths are available to meet specific applications. Laser diode-based illuminators deliver exceptional low life cycle costs, even illumination, and are the perfect complement to many near-infrared sensitive CCTV surveillance systems. ALS is a cost-effective alternative to thermal imaging cameras.

Experience
the difference.

Light up over 15 acres!

Without ALS-40



With ALS-40



BOTH SHOTS OF THE PIER WERE TAKEN AT 200 METERS:

Left Image: No active illumination; Right Image: With active illumination

| Features | Benefits |
|-----------------------------|---|
| • > 800 meter range | • Image targets at greater range than other technologies |
| • Illuminate up to 15 acres | • Cost effective solution for large area monitoring |
| • Class 1 Eye Safety | • Install anywhere |
| • 810 nm wavelength | • Invisible – eliminates light pollution, eliminates chromatic aberration |
| • > 20,000 Hour MTBF | • Low life cycle costs |
| • 30% efficient | • Low power requirements |
| • Rugged enclosure | • Install and forget |
| • Daytime operation | • Eliminate shadows |

ALS-40™ Laser Illuminator

Got a tough surveillance application?
ALS has the power to solve it!



Day/Night Imaging.

ALS has the power to overcome intense sunlight in challenging applications. Simply add a sunlight rejection filter and create even, consistent illumination under all ambient conditions.



Night Vision Aid.

Enhance your night vision when wearing night vision goggles by mounting ALS to your vehicle. Applications include military night driving, helicopter landing aid and vehicle-based border patrol.



Sunlight IR Illumination

Facial Recognition.

Eliminate shadows and lighting level variations that limit the effectiveness of facial identification systems.



Large Area Surveillance.

Only ALS has the power to light up large areas like public works. A single ALS-40 is proven to illuminate up to 15 acres, and reduces the need for multiple light sources and their associated installation and support costs.

| Specifications | |
|---------------------------------|---|
| Light Source | Laser Diode |
| Eye Safety | Class 1 IEC 60825-1 |
| Infrared Wavelength | Standard: 810 nm Optional: 850 nm, 950 nm |
| Beam Angle | Standard: 20° x 10° HxV Custom: Choose H and V 10°, 15°, 20°, ..., 70°, 75°, 80° |
| Light Distribution | Gaussian Distribution |
| Output Power | 25-35 Watts |
| Illumination Range ¹ | >800m |
| Voltage | 12 VDC |
| Current | 5 to 7 amps |
| Operating Temperature Range | -30°C to 60°C |
| Dimensions (HxWxD) | 16" x 10" x 12" |
| Weight | 18 lbs. |
| Enclosure | IP-65 |

¹ Range performance is subject to the sensitivity of the camera, the lens *f* number, atmospheric conditions and the position of the illuminator. Contact Electrophysics to review your specific requirements and estimate range performance.

| Infrared Illuminator Comparison | | | |
|---------------------------------|--------------------------|-----------------------|---------------------|
| | IR Incandescent 500 Watt | IRLED | ALS-40 |
| IR Light Power | ~ 10 watts | ~ 5 watts | 20 watts |
| Efficiency | 2% | 5% | 30% |
| Input Power | 500 watts | 140 watts | 60 watts |
| Wavelength | 730 nm | 850 nm | 810 nm |
| Bandwidth | 730 nm to 1000 nm | 830 to 870 nm | 810 ±2 nm (@30°C) |
| Cost | \$\$ | \$ | \$\$\$ |
| MTBF | ☉ | ☾ | ☾ |
| Range – Wide Angle (~ 60°) | 70 meters | 55 meters | 150 meters |
| Range – Medium Angle (~ 30°) | 100 meters | 115 meters | 400 meters |
| Range – Narrow Angle (~ 10°) | 140 meters | 175 (20° only) meters | 800 meters |
| Covert | No | Slight red glow | Yes (950 nm option) |

