



## DISCOVERII<sup>®</sup> Compact, long range night vision camera



Most current night vision solutions for the physical security and perimeter surveillance markets are plagued with range limits of less than 200 metres. Existing solutions that exceed this range limit are both large in size and high in cost, and primarily only available to military, law enforcement and government agencies.

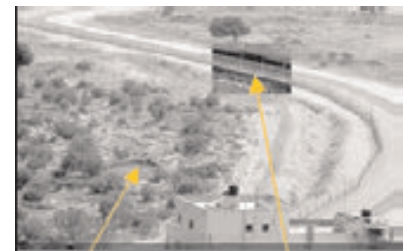
Discoverii is a compact and covert active infrared night vision system used to provide 24/7 video surveillance for a fence line surrounding a critical infrastructure.

Discoverii sheds new light on protecting distant perimeters, ports, pipelines and transportation infrastructure where video inspection is required at all times under all lighting conditions.

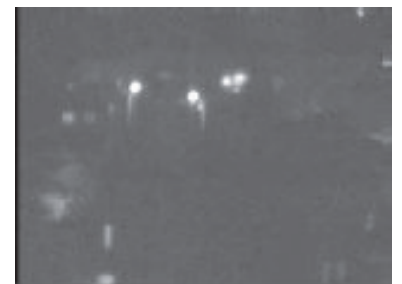
Discoverii is capable of illuminating and viewing a scene more than 1000 metres away using a low level infrared laser synchronized to an infrared sensitive camera and combined with spectral/ temporal filtering mechanisms and proprietary imaging and scanning algorithms. The user sees a live image that appears on-screen as if a spotlight is illuminating the scene. However, the subject has no idea they are illuminated with "invisible light."

### Why Discoverii?

- > Superb colour video during the day and utilizing a coherent illuminator to achieve a zoom-able high-resolution image in total darkness
- > 1,500+ metre operational range under total darkness and adverse weather conditions (fog, rain, dust, etc...)
- > Daylight high-resolution/high quality image, far superior to thermal imagers, light intensification and lamp/LED based active IR technologies
- > Creates natural non-thermal contrasts, detailing faces, visual marks, letters and symbols with "day-like" image resolution. Discoverii also penetrates through glass.
- > Capable of "smart scanning" using pre-planned tours, preset stops and gradual increase/decrease of beam divergence as a function of range
- > Uses Omni, which creates a panoramic image stitched to the night time video to improve user's orientation and situational awareness
- > Unlike active IR technology based on lamps and bulbs, Discoverii's laser illuminator has a significantly longer life and is relatively maintenance free
- > Discoverii offers excellent performance with small optical apertures and high magnification. This is ideal for target recognition, identification and intelligence gathering
- > Low power consumption due to the high efficiency of the illuminator
- > Skin and eye safe with proper installation and usage
- > Small size (less than 30 inches each dimension) and small weight (less than 15lb payload make Discoverii easy and affordable to deploy)



Static image      Discoverii illuminated



Night – 600m, no illumination



Night – 600m, illumination



### Market applications

- > Ideal for covert operations. Target area is illuminated with the non-visible illuminator's light, so subjects are not aware they are being illuminated
- > Long-range license plate and ship identification number recognition
- > Seamlessly integrates with threat detection sensors, such as anti-personnel radars, audio devices, scanning thermal imagers, PIR, microwave and seismic sensors
- > Excellent performance with small optical apertures and high magnification, ideal for target detection, recognition and identification
- > Enables the monitoring of remote and long distance locales, such as pipelines, borders, ports and large industrial facilities without huge numbers of sensors and security personnel patrols

### Configuration options

- > Stationary or pan & tilt capable
- > Slaved to external imaging or local target detection sensors (radar, scanning FLIR, PIR) or stand-alone
- > "Open" configuration for site perimeter or mounted inside a "smart pole" including communication and energy modules for railways/pipelines protection
- > Short/long range performance versions

### Main specifications

Discoverii is the Trade Mark of Vumii inc.

Man recognition range	3 km (day), 1.5 km (night)
Very high resolution day and night	Up to 27 iRad/TVL (about 1/2"/TVL at 0.5 km)
Number of effective pixels	630K (NTSC)/740K (PAL)
Optical zoo	25x
Overall zoom	300x (including 12x digital)
Angle of view	(H): 45° (WIDE) to 1° (TELE)
S/N ratio	50 dB
Electronic shutter speed	1/4 – 1/10,000 sec
Gain	Auto/Manual (-3 to 28 dB)
Back-light compensation	On/Off
Focusing system	Auto, One-push AF, Manual, Infinity, Interval AF, Zoom trigger AF
Video output	VBS: 1.0 Vp-p,Y/C
Pan range & speed	+ 210°, 0.5°/sec-100°/sec
Tilt range & speed	+ 40°, 0.5°/sec-30°/sec
Power source	120/230 VAC, up to 400W
PC controlled	RS 422
Environmental housing	Heater; window defroster; sun shroud and insulating blanket, rated IP66 and NEMA 4X