# **Xtruder RAVEN**

**Art.no -** XRA-00-14-01

## Survivability and stealth

The RAVEN InfraRed vision enhancement illuminator provides a perfectly shaped light enabling daylight speed in the darkest of hours.

The RAVEN illuminates a uniquely squared light image that is optimal for various covert operations, like driving with NVG (Night Vision Goggles). It is perfectly suited to support an IR vision enhancement camera system or to be used to illuminate areas for high performance sensor systems like pan-tilt units or for helicopter operations.

The Xtruder RAVEN is made to increase the operational capabilities for a multitude of nighttime operations while maintaining a very low detectability.

#### **Wise Shadow Tech**

The RAVEN's tailored light beam is shaped deliberately to match an infrared driving enhancement camera system in such a way that it fits the screen perfectly, illuminating only the camera field of view and thereby reducing the risk of spill light that ultimately can lead to detection.

The light beam is shaped to reduce the direct ground reflection and thereby enhancing the driver's depth perception enabling a more stealthy and secure navigation.

The Wise Shadow Tech has three functionalities:

- The RAVEN only illuminates the area portrayed by the camera system.
- · No ground reflection to disturb the IR image, giving a very even and smooth picture.
- No unnecessary spill light providing a much lower IR profile providing the user the option to utilize ground cover when applying the IR driving lights.

"Don't be acquired.
Don't be seen.
Don't be hit."

## **Product features**

Fully digital illuminators

Modular & upgradable

Single output

▶00 Instant IR, including NIR or SWIR

Minimal lifetime maintenance

Optimized for size, weight and power consumption (SWAP)





## Adjustable and scalable

Xtruder RAVEN has multiple pre-fixed lens options which allows for focused or extended IR modes. It can be configured to beam angles all up to 80 degrees horizontal, 30 degrees vertical and can illuminate at 50 meters. Xtruder RAVEN comes in two variants:

- 12–32 VDC with a nominal power consumption of 25watts.
- 18–32VDC with a nominal power consumption of 40 watts

## Instant output NIR/SWIR

Xtruder RAVEN is a compact digital illuminator with a wide-ranging infrared spectrum. The IR capacity includes wavelengths in the range of 810 – 1650 nm, from NIR to SWIR. With a weight of only 600gr, Xtruder RAVEN has a unique weight to performance ratio. Xtruder RAVEN is probably the smallest, lightest and most ruggedized illuminator on the market complying with requirements for various land and maritime platforms.

## Fully digital and integrable

Xtruder RAVEN can also be integrated as a part of an EO/IR module or delivered with an analogue control panel for seamless operation. The Xtruder RAVEN is easily integrated to existing platforms with both analog and RS422 interface. **Ruggedized and EMC compliant.** All Xtruder military portfolio products meet the highest requirements for electromagnetic interference according to EMC EU directives and military standards, as well as IP68, for prolonged immersion in water. The low EMC profile enables the placement of the RAVEN near any counter IED equipment including antennas or sensors.

#### Minimal lifetime maintenance

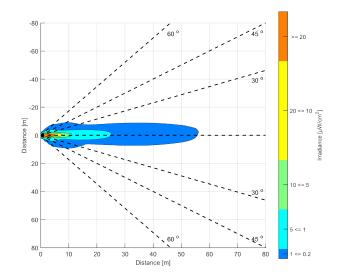
Raven is entirely based on solid state technology and has no moving parts. Furthermore, the LED technology used makes the RAVEN a near zero maintenance product with a high durability and long-life cycle.

RAVEN is ITAR-free and not controlled by export regulations.

## **Illumination patterns**

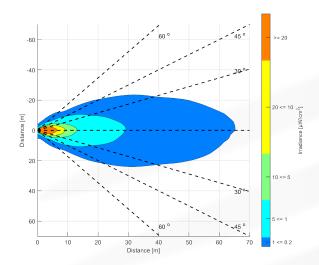
## Horizontal view

## **Vertical view**



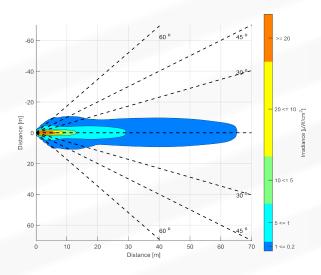
Measured at 25 Watt

## Horizontal view



Measured at 40 Watt

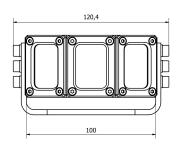
## Vertical view

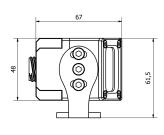












\*Dimensions are estimates and may change.

Specifications	RAVEN
Height	48 mm
Width	100 mm
Depth	67 mm
Weight	600 gram
Surface Treatment:	Alu Hard Anodized MIL A8628 Type III Class 2 Black.
MILSTD	461E/F, 810G/H, 1275SE
Power consumption W	25-40 W
Standby power consumption	Less than 3 W
Input range (DC)	12-32V
Divergence	80 degrees horizontal, 30 degrees vertical
LED options:	940 nm, others on request
Connector:	MIL-DTL 38999 series
Glass	Black Acrylic, glass filters on request

## **About Wiseled**

Since the founding of Wiseled in 2003, the company has evolved into an internationally recognized provider of LED and laser illuminators. This has been achieved by means of continuous research and development, engineering and manufacturing excellence, and a steadily growing range of products for the military, maritime and security markets.

Our products are designed for various applications, including integration with optic and sensor modules to enable operations in extreme environmental conditions. Our solutions enhance operator's ability to observe, detect and engage targets with increased accuracy and reduced collateral damage.

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