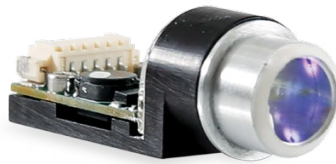


MLI-100



MLI-400

# FLIR MLI

## 100 mW & 400 mW VCSEL-Based Miniature Laser Illuminator

FLIR's VCSEL-based Miniature Laser Illuminator (MLI) is designed for SWaP-sensitive platforms, including unmanned aerial vehicles and hand-held systems for military personnel. Available in 100 mW and 400 mW models at 808, 850, or 860 nm, the MLI is controlled through a serial port and can operate in both CW and QCW modes. Externally controlled brightness and pulsing are available. Because the MLI is an OEM component, FLIR can customize it to fit your specific requirements.

### KEY FEATURES

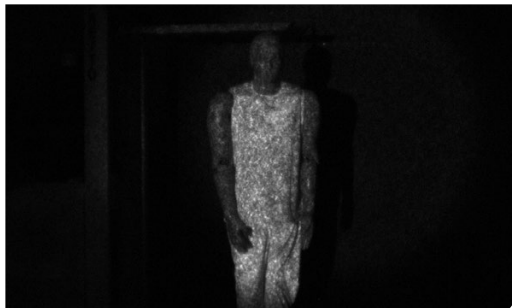
- Uses proprietary Vertical-Cavity, Surface-Emitting Laser (VCSEL) technology
- Improved eye-safety from VCSELs over conventional laser diodes
- Speckle-free, high-quality illumination
- Long range illumination capability
- Fully programmable for stand-alone operation or flexible system integration
- Wide voltage acceptance range and integrated thermal control
- Available NIR wavelengths at 808/850/860 nm

### APPLICATIONS

- Handheld
- Unmanned Vehicles
- Dismounted Soldier
- Gimbaled



MLI-400 VCSEL illumination example featuring superior beam quality with no speckle.



Typical edge emitter laser-based illumination quality with high speckle contrast.

## Specifications

Parameter	MLI-100	MLI-400
Available Wavelengths	808 / 850 nm	808 / 860 nm
Laser Output Power	100 mW	400 mW
Conversion Efficiency	+30%	+30%
FWHM Divergence	3°	4°
Technical Data		
Dimensions (LxWxH)	30.9 x 11.5 x 12.5 mm	34.6 x 11.5 x 11.5 mm
System Weight	6 g	5 g
Classification	Class 3B Laser	Class 3B Laser
Input Power	4-40 V	4.5-27 V
Control	strobe and PWM brightness control	strobe and PWM brightness control, optional UART communication

MLI-100



MLI-400



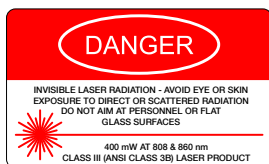
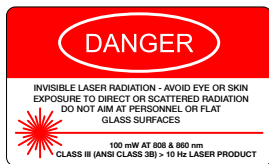
2x Farther range capability with MLI-400

## Related Package Assemblies *(VCSEL in TO Can)*

Available Wavelengths	808 / 850 nm	808 / 860 nm
Laser Output Power (QCW)	100 mW	400 mW
Conversion Efficiency	+30%	+30%
Threshold Current	25 mA	200 mA
Operating Current	150 mA	550 mA
Operating Voltage	2.2 V	2.3 V
FWHM Divergence	12°	17°
Package	TO-46	TO-46 (Ø4.6 mm) or TO-39 (Ø9 mm)



VCSEL in TO Can



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## ITAR

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