# Product Document

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## Industrial high-power flood illuminator ams.com/EGA2000

### EGA2000 - Industrial high-power flood illuminator

- Delivers highly uniform illumination of the rectangular field-of-view (FOV)
- Multiple field-of-illumination and wavelength options
- Compact design in slim package
- Best-in-class VCSEL and optics enable module efficiency
- Full traceability with unit level track feature (ULT with 2D barcode)

### Sensing **is life.**



#### **General Description**

The EGA2000 module is specifically designed for open-space monochromatic infrared high power uniform illumination. The ultra-compact modules are assembled with ams' state-of-the-art opto-electronics component manufacturing processes and are reflow solderable. These modules, using laser illumination, allow improved efficiency, reduced footprint, and overall improved system performance. The EGA2000 can be used for illumination in conjunction with industrial 3D sensing cameras as well as

2D imaging systems for a variety of applications like object dimension detection in robotics and logistics, 3D mapping of the environment for autonomous guided vehicles (AGV) including household robots, 3D face authentication for e-locks and e-payment terminals and illumination in night vision systems. The EGA2000 modules produce high optical output power at either 850nm or 940nm with three field-ofillumination options: 58°x41° (N), 74°x52° (W) and 104°x84° or 102°x85° (UW) FWHM.

#### Applications

- Industrial applications using Time-of-Flight and 2D NIR Imaging
- Factory automation: e.g. machine vision, volume measurement
- Home automation: e.g. smart robots, smart speakers
- Smart cities, e.g. smart banking, contactless access control
- Entertainment: e.g. night vision in Wargame

#### Features

- >4W optical output power in a pulsed mode
- 3 FOI options,  $58^\circ \times 41^\circ$  (N),  $74^\circ \times 52^\circ$  (W) and  $104^\circ \times 84^\circ$  or  $102^\circ \times 85^\circ$  (UW) FWHM available at both 850nm and 940nm
- Small packaging: 4.1mm  $\times$  4.1mm  $\times$  1.38mm
- High power conversion efficiency
- Standard lead-free solder reflow compatible
- 2D barcode for unit level traceability

#### EGA2000



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