ENFIS UNO Tile Array Infra-Red (NIR) 870nm

Smart, powerful, compact, efficient, reliable light

Features & Benefits

- **Intense, high-power Infra-Red spot source**
- **Ultra-high power density**
- **Long-life and reliable, high-performance due to excellent thermal conductivity**
- **Simple integration via connectorized PCB with mounting holes**

Outline Specification

- **4500mW Typical power**
- **0.5cm^2 Aperture**
- **9000mW/cm^2 Power density**
- **Input Power: 38W**
- **Typical thermal resistance <1.7°C/W**

Light Engine Integration

Enfis can eliminate the time, cost and risk of integration by offering our arrays as part of a complete light engine solution

Thermal Management

Enfis arrays are designed to provide excellent thermal conductivity and to be integrated effectively with thermal hardware to ensure optimum performance and life

Optics

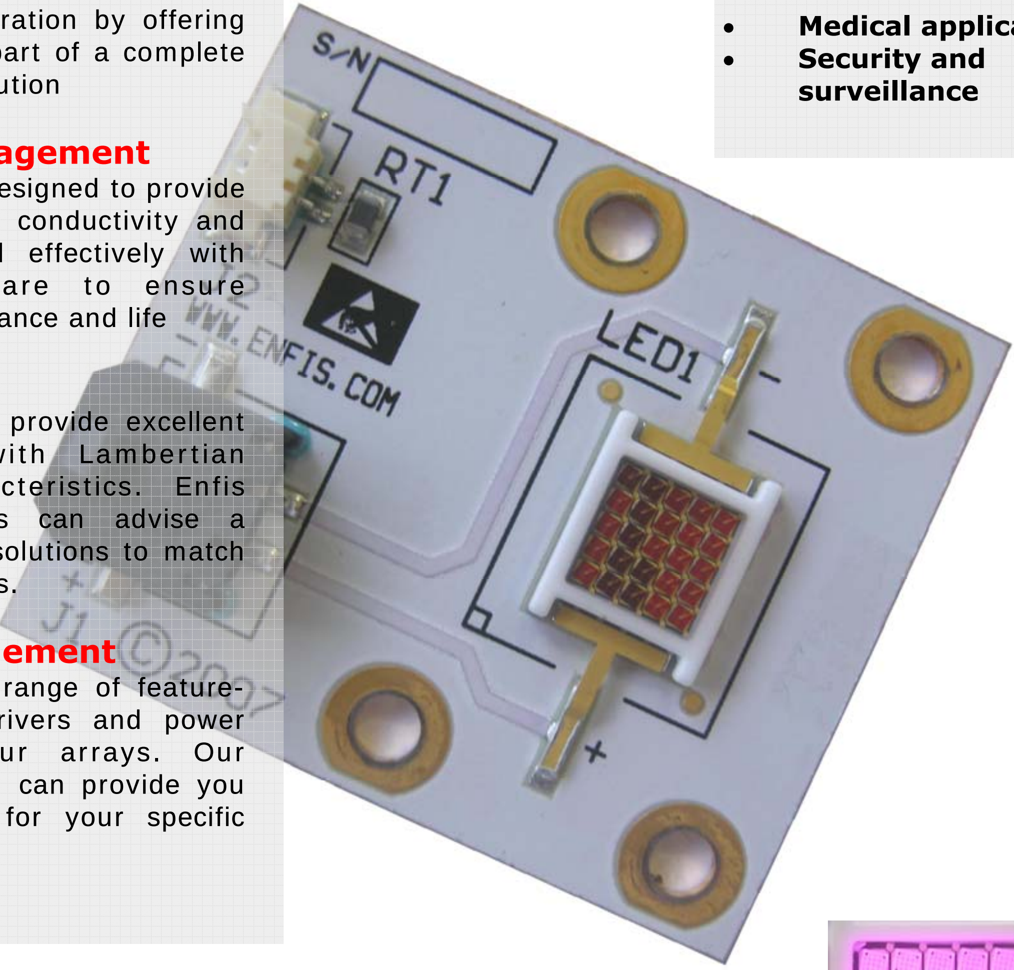
Enfis Uno arrays provide excellent spot source with Lambertian emission characteristics. Enfis technical experts can advise a range of optical solutions to match your requirements.

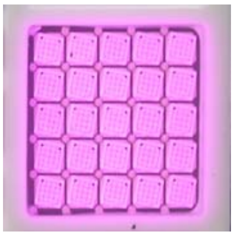
Power Management

Enfis provides a range of feature-rich, powerful drivers and power supplies for our arrays. Our applications team can provide you with a solution for your specific requirements.

Applications & Markets

- **Medical applications**
- **Security and surveillance**





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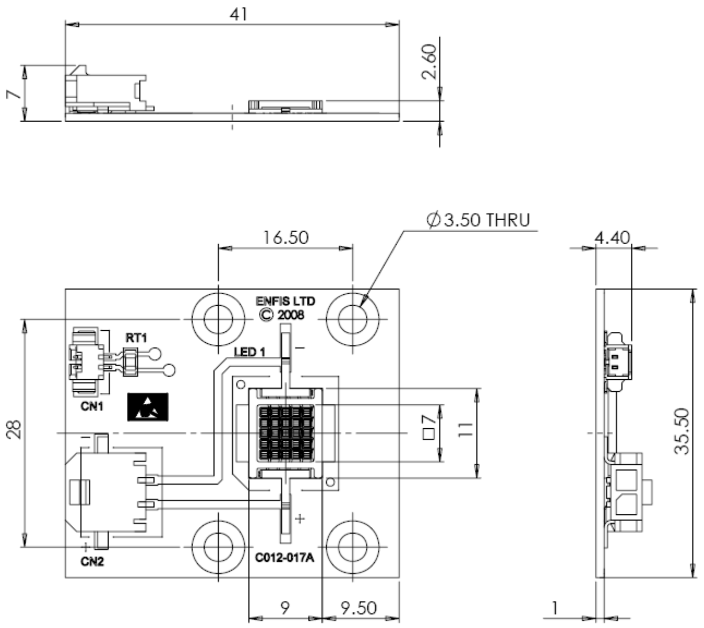
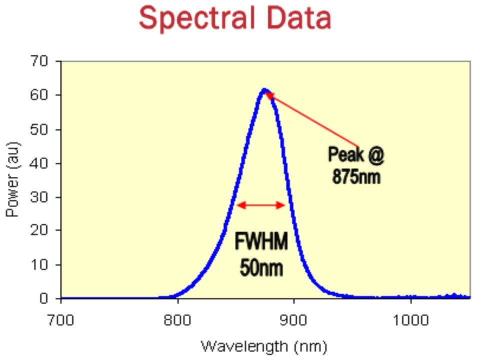
Technical Specification

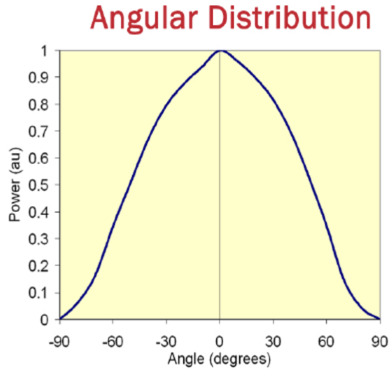
Electro-Optical Characteristics

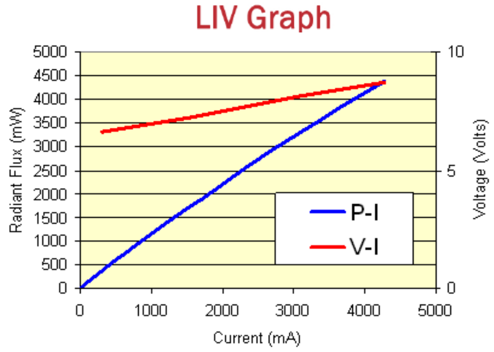
Item	Min	Typ	Max
Rated Current If (mA)		4300	
Forward Voltage Vf (Volts)	7	9	11
Peak Wavelength λp (nm)	850	870	890
Spectral Width Δλ (nm)	40	50	60
Total Radiant Flux ΦR (mW)	4000	4500	
Radiant Flux Density ΦR/A (mW/cm^2)	8000	9000	
Total Electrical Power P (W)		38	



All measurements performed at a heatsink temperature of 25°C


Spectral Data


Angular Distribution


LIV Graph

Heat Generation
Proper thermal design of the end product is of paramount importance. The operational junction temperature of each LED chip should be kept below 125°C. Please contact Enfis for further support in this matter.

Handling LED Array
Contact with the encapsulation on the surface of the LED array must be avoided to prevent damage.
Do not apply pressure to the encapsulation or allow it to come into contact with sharp objects.
During operation the encapsulation will be hot and contact should be avoided

Static Electricity
Care must be taken when handling, these products are sensitive to static electricity .
Observe static handling precautions.

Cleaning
Avoid touching the LED array surface.
To clean—BLOW surface with either dry air or nitrogen gas

Eye Safety Precautions
The light output of the products may cause injuries to human eyes in circumstances where the products are viewed directly with unshielded eyes for more than a few seconds.

Please refer to IEC 60825-1:2001 for further information

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