ENFIS QUATTRO Array RGBA

Smart, powerful, compact, efficient, reliable light

Features & Benefits

- **Intense, high-power RGBA spot source**
- **Superior colour-mixing via dense packaging and interleaving of colours**
- **Addition of Amber channel improves richness of colour-mix over conventional RGB technology**
- **Enables active monitoring of light output via embedded smart array technology**
- **Long-life and reliable, high-performance due to excellent thermal conductivity**
- **Simple integration via connectorized PCB with mounting holes**

Outline Specification

- **Typical power:**
  R: 6800mW
  G: 10000mW
  B: 20000mW
  A: 2400mW
- **16cm² Aperture**
- **Input power: 200W**

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

Smart Array Technology

Light output from Enfis Arrays can be monitored and controlled via a patent-pending integrated photo-detection system, enabling precise control of light output.

Thermal Management

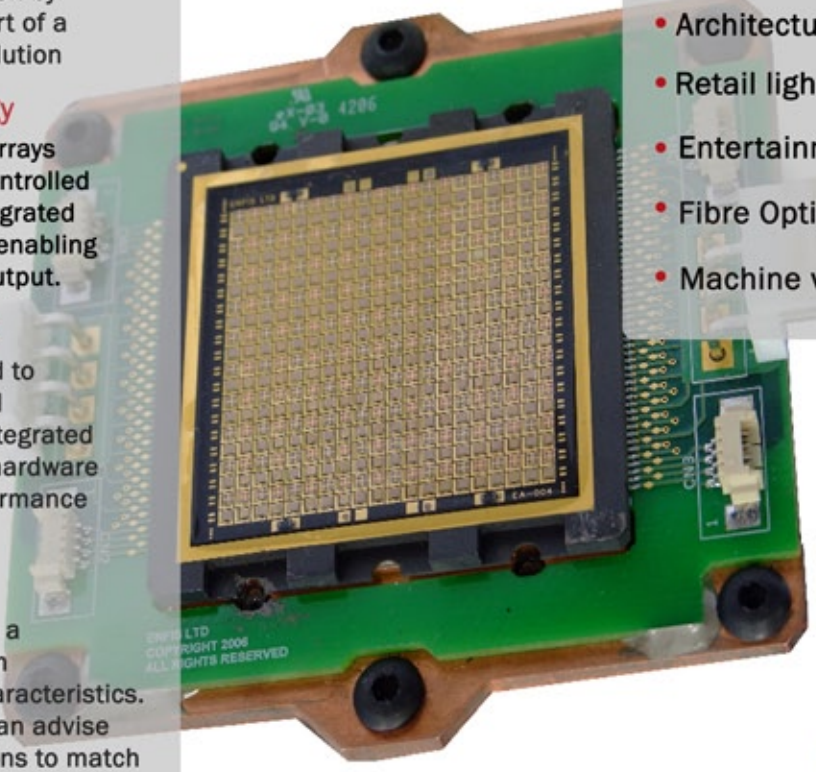
Enfis arrays are designed to provide excellent thermal conductivity and to be integrated effectively with thermal hardware to ensure optimum performance and life.

Optics

Enfis UNO arrays provide a compact 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

- General lighting
- Architectural lighting
- Retail lighting
- Entertainment lighting
- Fibre Optic illuminators
- Machine vision

ENFIS LIMITED
TECHNIUM 2, KING'S ROAD
SWANSEA WATERFRONT
SWANSEA SA1 8PJ UK

TEL +44 (0)1792 485660
FAX +44 (0)1792 485537

ENFIS

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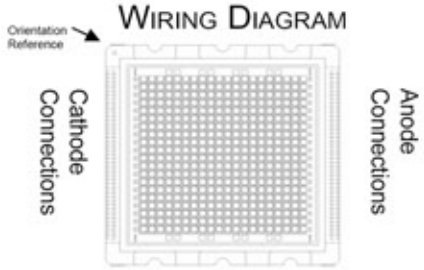
Technical Specification

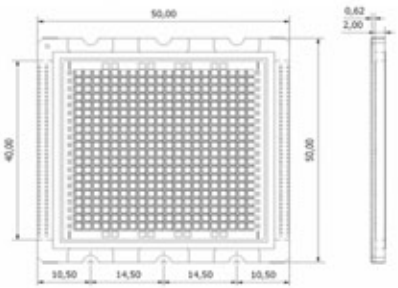
Electro-Optical Characteristics

Channel	Red			Green			Blue			Amber		
Item	Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	Min	Typ	Max
Rated Current I_f (mA)		2200			4000			4000			1800	
Forward Voltage V_f (Volts)		22			37			36			23	
Dominant Wavelength λ_d (nm)		620			525			470			590	
Radiant Flux Density $d\Phi_e/dA$ (mW/cm²)		6800			10000			20000			2400	
Total Luminous Flux Φ_L (Lumen)		1200			4800			1100			1100	
Colour Temperature (K)	3000	6500	8000	3000	6500	8000	3000	6500	8000	3000	6500	8000
Luminous Efficacy (Lm/Watt)	20	25		20	25		20	25		20	25	
CRI @ 6500°K		75			75			75			75	
Total Electrical Power P (W)		380			380			380			380	

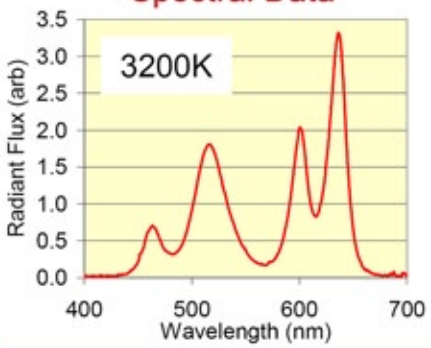
Wiring Diagram



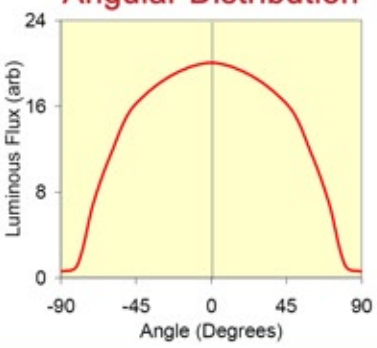
C5:C44 Cathode Power A5:A44 Anode Power
C1-C4, C45-C49 and A1-S4, A45-A49 are for SMART array connections.



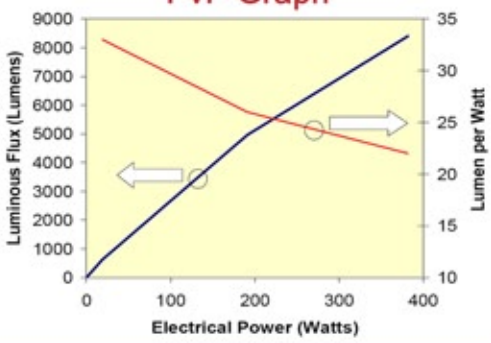
Spectral Data



Angular Distribution



PvP 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 encapsulant on the surface of the LED array must be avoided to prevent damage.
Do not apply pressure to the encapsulant or allow it to come into contact with the sharp objects.
During operation the encapsulant 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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WWW.ENFIS.COM

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