

intense

next generation lasers



QCW STACKED ARRAYS

Hermes 600W Mini-Stack

**808 nm High Power QCW Laser Arrays,
to 600W in a Compact Footprint for Aerospace
Defense, and Industrial Pumping Applications**

The Hermes family of High Power QCW Stacked Arrays combines high reliability with robust, modular packaging and extended operating temperatures. This makes Hermes an ideal choice for the most demanding applications. These arrays are offered in a standard wavelength of 808 nm. Custom wavelengths, power levels, and package configurations are available on request, including 940 nm and multi-color wavelengths.

Hermes lasers are based on Intense's patented **Quantum Well Intermixing (QWI)** technology, which increases the brightness and reliability of the lasers while avoiding the usual problems associated with catastrophic optical mirror damage (COMD).

Assembled using AuSn hard solder, Hermes QCW stacked arrays are designed for a wide range of aerospace, defense, and industrial applications, including range finding, illumination, designation, and pumping.

Typical Specifications @ 25°C

Hermes		600W "Mini"			
Peak Output Power	(W)	> 600			
Operating Voltage	(V)	< 18			
Number of Bars		9			
Emitters per Bar		22			
Emitter Size/Pitch		100 µm / 125 µm			
		Min	Typ	Max	
Center Wavelength	(nm)	803	808	813	
Optional Wavelengths	(nm)	940, multi-color, custom			
Spectral Width	(nm)		4	6	(FWHM)
Wavelength Shift	(nm/K)		0.28		
Beam Divergence	(°)		36	40	(vertical)
Beam Divergence	(°)		12	14	(horizontal)
Stack Pitch	(µm)	345	350	355	
Operating Temp	(°C)	15		65	
Storage Temp	(°C)	-20		85	
Operating Current	(A)		60		
Nominal Frequency	(Hz)		100		
Pulse Width	(µs)		100		
Duty Cycle	(%)			1.0	
Conversion Efficiency	(%)		50		
Threshold Current	(A)		5	6	



4 Stanley Boulevard,
Hamilton International
Technology Park,
Blantyre, Glasgow, G72 0BN
Scotland
Tel: +44 (0) 1698 827000
Fax: +44 (0) 1698 827262

E-mail: sales@intenseco.com
Web: www.intenseco.com

1200A Airport Road
North Brunswick, NJ 08902
USA
Tel: +1 732 249 2228
Fax: +1 732 249 8139



Laser 2000 GmbH
Argelsrieder Feld 14
D-82234 Wessling

Tel. +49 8153 405-0
Fax +49 8153 405-33
info@laser2000.de

www.laser2000.de