

## QCW-800-C

Robust Stack with 8 collimated Laser bars at 1.2 mm pitch

### General Description

Over many years of development, SCD has become an established supplier of high-power laser bar and stack products in a broad wavelength range from 750 nm to 1100 nm, primarily for DPSSL pumping applications. Built upon SCD's RobustHead™ packaging technology and proprietary chip design, our laser diode arrays can be assembled in different configurations for QCW operation with peak powers in the kilowatt range. Special designs are available for CW operation and high-quality beam collimation with precision optics.

### Main Features

- High Temperature Operation
- Robust design
- Long operating life
- Qualified for harsh environment
- Dimensions and interface can be altered for best integration to customer's needs

### Applications

- Diode pumped solid state lasers
- Direct applications requiring highly collimated beams




## Typical Performance

Product Name			Value
Diode Type			QCW
Output peak Power	W		800
Output Power per bar			100
Drive Current	A		105
Operating Voltage	V	≤	16
Conversion Efficiency	%	≥	40
Center Wavelength	nm		808
Spectral Width (FWHM)	nm	≤	4
Beam Divergence (FWHM)			0.6° x 10°
Emitting Area	mm		10.4 x 9.4
Duty Cycle	%		4
Number of Bars	#		8
Bar to Bar Pitch	mm		1.2
Heat Seak Temperature	°C		25

DANGER

Invisible laser radiation---  
avoid eye or skin exposure  
to direct or scattered  
radiation



Eye protection required  
class 4 laser product

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Devices are highly  
sensitive to ESD.  
Terminals must be  
short-circuited unless  
required for operation

SCD reserves the right to change product design and specification at any time without notice. No responsibility is assumed for the use of these products, nor for any infringement on the right of others, resulting from the use of these products. Laser diode product components are intended for use in a user devised end system. However, these products are capable of emitting Class IV radiation. Extreme care must be exercised during their operation. Only persons familiar with the appropriate safety precaution should operate a laser product. Direct viewing of the laser beam exposure to specular reflections, must be avoided.

Serious injury may result, if any part of the body is exposed to the beam. The eye is extremely sensitive to the infrared radiation and therefore, proper eyewear must be worn at all times. Use of optical instruments with these products, may increase eye hazard. Always wear proper eye protection when operating.