



# ARIES-2<sup>TM</sup> HIGH POWER, FIXED WAVELENGTH

DRS Daylight's years of experience and field-proven performance in high-power mid-IR lasers come together in the Aries-2 family of products. The Aries-2 is a fixed-wavelength, high-power laser that offers a user-specified center wavelength and output power up to 2 W. Aries-2 provides CW or pulsed operation with internal or external amplitude modulation. It is CDRH compliant and is CE certified.

All Aries-2 systems come with a SideKick™ laser controller and a GUI and SDK to give you everything you need for productivity out of the box.

#### **HIGHLIGHTS**

- Optical power of up to 2 W
- Center wavelength choices include 4.0, 4.6, 8.7, 9.1, and 10.5 μm
- · CW or pulsed output
- Superb TEM<sub>00</sub> beam quality allows fiber coupling
- Superior power stability (< 2% rms, 1 hr)
- Amplitude modulation up to 1 MHz
- SideKick™ controller, GUI, and SDK included with all systems
- Proprietary HFQD™ circuitry to protect your chips

## HIGH POWER, FIXED WAVELENGTH

#### **APPLICATIONS**

- Stand-Off Explosive Detection
- · Chemical Agent Detection
- Infrared Detector Testing
- Multispectral Active Imaging
- Infrared Countermeasures
- Free-Space Communications
- Infrared Scene Generation
- · Optical Fiber Testing

### **SPECIFICATIONS**

#### OPERATION MODE

Pulsed or CW

#### **SPECIFICATIONS**

Dimensions (LxWxH)

Center Wavelength Availability 4-11  $\mu$ m\* Spatial Mode TEM $_{\infty}$  (nominal) Beam Divergence < 4 mrad\*\*

(full angle, 1/e² intensity width)

Beam Diameter < 5 mm<sup>2</sup>

(1/e2 intensity width)

14 x 7 x 8.6 cm

Ellipticity < 1.5
Pulse Repetition Frequency CW to 1 MHz
Rise/Fall Time (10-90%) < 100 ns
QCL Compliance Voltage < 17 VDC
QCL Operating Current < 3 A
Operating Range (Case Temp) 15 - 55 °C

PERFORMANCE EXAMPLES	
Center Wavelength (µm)	Optical Power (W)
4.0	1.0
4.6	2.0
8.7	0.5
9.1	1.0
10.5	0.3

The information in this data sheet is to the best of our knowledge, accurate as of the date of issue.

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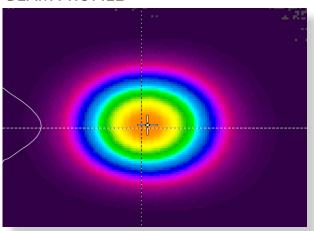
\*Call for specific wavelength availability

\*\* Measured at 4 µm; scales with wavelength - please inquire

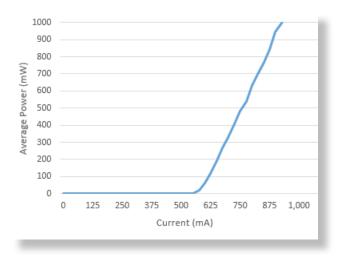
Forced air and liquid cooling accessories required for higher duty cycles

Water cooling required for CW operation or pulsed duty cycles > 5%

#### **BEAM PROFILE**



#### **POWER CURVE**



INVISIBLE LASER RADIATION AVOID EYE OR SKIN EXPOSURE TO DIRECT OR SCATTERED RADIATION CLASS 4 LASER PRODUCT



COMPLIES WITH 21 CFR 1040.10 AND 1040.11 EXCEPT FOR DE-VIATIONS PURSUANT TO LASER NOTICE NO. 50, DATED JUNE 24, 2007. COMPLIES WITH IEC 60825-01

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