

## Arktis Laser Product Datasheet

### LWL-1064 Lamp-Pumped Q-Switched DPSS Laser System



#### Series Specifications:

Nominal Wavelength	1064 nm
Output Type	Q-Switched
Laser Source Type	Lamp-Pumped Solid St

#### Overview:

The LWL-1064 Series of Lamp-Pumped Solid-State Q-Switched Lasers offer extremely high pulse energies in the range of 0.1-1.0 J. The laser uses an embedded EOM to control the pulse frequency at a fixed rate of 10 Hz. The pulses themselves are extremely short, only 9 ns in duration, so the peak power during each pulse is in the range of 10-100 megawatts (MW).

Laserglow products are currently being used by some of the world's top universities and other prominent research facilities.

#### Key Features:

- EOM Q-switch generates short, powerful pulses
- Closed-loop water cooling system
- Runs on standard AC power (85 - 264 V, 47 - 63 Hz)
- FDA/CDRH Compliant Class IV enclosure

#### Package Includes:

- Laser Head
- Driver/Power Supply
- Water chiller

## Specifications:

This spec sheet has been generated specifically for part number UA6-L, per your request, and data for the entire series is also displayed for your reference. The specs which are specific to UA6-L have been highlighted below in **red + bold**.


Output Power (W)	1, 3	<b>5, 8, 10</b>
Single Pulse Energy ( $\mu$ J)	100,000, 300,000	<b>1,000,000, 500,000, 800,000</b>
Optimal Pulse Frequency (Hz)	10	<b>10</b>
Output Power Stability (%RMS/4h)	<3, <5	<b>&lt;3</b>
Wavelength Tolerance (+/- nm)	1	<b>1</b>
Divergence (mrad, full angle)	<3	<b>&lt;3</b>
Beam Dimensions (mm, 1/e <sup>2</sup> )	8	<b>8</b>
Warm-up Time (minutes)	15	<b>15</b>
Avg. Pulse Duration (ns)	9	<b>9</b>
Approximate Peak Power (W)	10,000,000, 30,000,000	<b>100,000,000, 50,000,000, 80,000,000</b>
Beam Pointing Stability (mrad)	<0.05	<b>&lt;0.05</b>
Operating Temperature Range (°C)	15 to 35	<b>15 to 35</b>
Max. TTL Modulation Freq. (Hz)	10	<b>10</b>
Modulation Input Signal	0-5 VDC	<b>0-5 VDC</b>
Max. Power Input Duty Cycle	100%	<b>100%</b>
Standard Warranty (months)	12	<b>12</b>
MTTF (operational hours)	10000	<b>10000</b>
Beam Height from Base Plate (mm)	75	<b>80</b>
Dimensions of Product or Laser Head (mm)	450 (l) x 150 (w) x 130 (h)	<b>600 (l) x 245 (w) x 130 (h)</b>

CW: All specifications are based on performance at full output power and after the specified warmup period. Output characteristics may change if the laser is run at a different power level.

Q-Switched: Specifications are based on the laser pulsing at the specified design frequency. Output characteristics may change if the laser is run at a different frequency.

## Power Supply Options:

These lasers are available with several different power supply options. The model that you have selected is highlighted below, and any other options are shown for easy reference.

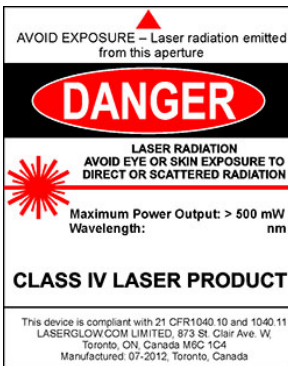
	Power Supply Type:	<b>FL</b>
FDA-Compliant Driver 	Input Power	<b>85v to 264v</b>
	Power Supply Weight (kg)	<b>15</b>
	Dimensions (mm)	<b>480 (l) x 465 (w) x 135 (h)</b>

\*Power supply may not be exactly as shown, see dimensional drawings on next 2 pages.

\*Dimensions for fiber-integrated (I\_) include laser head packaged inside.

## Regulatory Classification:

The model you have selected (UA6-L) requires the following safety label(s):



**Accessories:**

The most popular accessories for model UA6-L are shown below. For additional details regarding these or other accessories please see our website or contact us directly.

Part Number	Description	
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**FOR MORE INFORMATION PLEASE CONTACT:**

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E&OE: Data included in this sheet may be subject to change without notice.

Please confirm critical specifications with our staff prior to ordering.