

## 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 (μJ)	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.

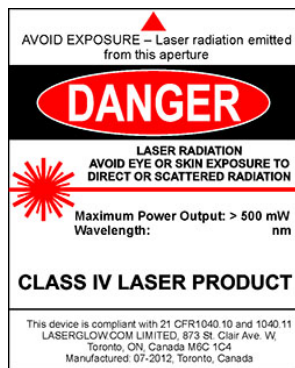
<div>FDA-Compliant Driver</div> 	Power Supply Type:	<b>FL</b>
	Input Power	<b>85v to 264v</b>
	Power Supply Weight (kg)	<b>15</b>
	Dimensions (mm)	<b>480 (l) x 465 (w) x 135 (h)</b>

\*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.