

## Arktis Laser Product Datasheet

### LQS-0660 Passively Q-Switched Laser System



#### Series Specifications:

Nominal Wavelength	660 nm
Output Type	Q-Switched
Laser Source Type	DPSS

#### Overview:

The LQS-0660 Series of Diode-Pumped Solid-State (DPSS) Q-Switched Lasers are ideal for applications requiring a very high peak power or short pulse duration at 660 nm.

These lasers are commonly used for high-speed imaging, Raman spectroscopy, material processing, and a broad range of other applications. The driver is available as a plug-and-play benchtop system or an O.E.M. component designed for system integration.

#### Key Features:

- Pulse energy of 1  $\mu$ J - 2  $\mu$ J
- Pulse repetition rate of 1 Hz - 2 kHz
- Pulse duration of 15 ns
- Air cooled
- Runs on standard AC power (85 - 264 V, 47 - 63 Hz)
- 10,000 hour maintenance-free operating life (Expected)
- FDA/CDRH compliant Class IV enclosure

#### Package Includes:

- Laser Head
- Driver/Power Supply
- Power Cable
- BNC Connector (LabSpec models only)
- Keys, Safety Interlock
- Hard-shell Carrying Case

## Specifications:

This spec sheet has been generated specifically for part number Q66-M, per your request, and data for the entire series is also displayed for your reference. The specs which are specific to Q66-M have been highlighted below in **red + bold**.

Output Power (mW)	<b>&gt;2, &gt;4, &gt;10</b>
Single Pulse Energy (μJ)	<b>1, 2, 10</b>
Optimal Pulse Frequency (Hz)	<b>2000</b>
Output Power Stability (%RMS/4h)	<b>&lt;1, &lt;3, &lt;5</b>
Central Wavelength (nm)	<b>660</b>
Wavelength Tolerance (+/- nm)	<b>1</b>
Divergence (mrad, full angle)	<b>&lt;1.5</b>
Beam Dimensions (mm, 1/e <sup>2</sup> )	<b>1.2</b>
Warm-up Time (minutes)	<b>10</b>
Avg. Pulse Duration (ns)	<b>15</b>
Approximate Peak Power (W)	<b>100, 330</b>
M <sup>2</sup>	<b>&lt;1.2</b>
Operating Temperature Range (°C)	<b>10 to 35</b>
Max. TTL Modulation Freq. (Hz)	<b>20000</b>
Minimum Pulsing Frequency (Hz)	<b>1</b>
Modulation Input Signal	<b>0-5 VDC</b>
Max. Power Input Duty Cycle	<b>100%</b>
Standard Warranty (months)	<b>12</b>
MTTF (operational hours)	<b>10000</b>
Weight of Product or Laser Head (kg)	<b>0.6</b>
Beam Height from Base Plate (mm)	<b>24.8</b>
Dimensions of Product or Laser Head (mm)	<b>140.8 (l) x 73 (w) x 46.2 (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 Standard</div> <div></div>	Power Supply Type:	<b>SM</b>
	Input Power	<b>85v to 264v</b>
	Power Supply Weight (kg)	<b>1.2</b>
	Dimensions (mm)	<b>133 (l) x 130 (w) x 65 (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 (Q66-M) requires the following safety label(s):





Dimensional Drawing - Power Supply Form Factor: SM:



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN MM(INCH)  
TOLERANCES: +/- 0.75 MM

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Laserglow Technologies

TITLE:

Power Supply  
SM/SR

REV  
1

SCALE: 1:2

SHEET 1 OF 1

**Accessories:**

The most popular accessories for model Q66-M 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:**

Arktis Laser

112 Elizabeth St, Unit 5-331, Toronto, ON, Canada M5G 1P5

Tel. 1-416-886-1178 Fax 1-647-874-7129

[sales@arktislaser.com](mailto:sales@arktislaser.com) [www.arktislaser.com](http://www.arktislaser.com)

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

Please confirm critical specifications with our staff prior to ordering.