

## LQS-0266 Passively Q-Switched Laser System



### Series Specifications:

Nominal Wavelength	266 nm
Output Type	Q-Switched
Laser Source Type	DPSS

### Overview:

The LQS-0266 Series of Diode-Pumped Solid-State (DPSS) Q-Switched Lasers are ideal for applications requiring a short wavelength or high photon energy.

These lasers are commonly used for fluorescence excitation, 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 3 uJ
- Pulse repetition rate of 1 kHz - 4 kHz
- Pulse duration around 7 ns
- Air cooled
- Runs on standard AC power (85 - 264 V, 47 - 63 Hz)
- 5,000 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 Q26-Q, per your request, and data for the entire series is also displayed for your reference. The specs which are specific to Q26-Q have been highlighted below in **red + bold**.

Laser Form Factor	<b>Q</b>
Output Power (mW)	<b>&gt;12, &gt;20</b>
Single Pulse Energy ( $\mu$ J)	<b>3, 5</b>
Optimal Pulse Frequency (Hz)	<b>4000</b>
Output Power Stability (%RMS/4h)	<b>&lt;5, &lt;10</b>
FDA Safety Class	<b>IV</b>
Central Wavelength (nm)	<b>266.95</b>
Wavelength Tolerance (+/- nm)	<b>1</b>
Divergence (mrad, full angle)	<b>&lt;3</b>
Beam Dimensions (mm, 1/e <sup>2</sup> )	<b>0.8x3.2</b>
Transverse Mode	<b>Near TEM00</b>
Longitudinal Modes	<b>Multiple</b>
Warm-up Time (minutes)	<b>10</b>
Avg. Pulse Duration (ns)	<b>5</b>
Approximate Peak Power (W)	<b>700, 714</b>
Optical Noise Amplitude (%RMS @ 20 Hz - 20 MHz)	<b>&lt;20</b>
Spectral Linewidth (nm)	<b>&lt;0.1</b>
M <sup>2</sup>	<b>&lt;1.5</b>
Polarization Ratio	<b>&gt;100</b>
Beam Pointing Stability (mrad)	<b>&lt;0.05</b>
Operating Temperature Range (°C)	<b>10 to 35</b>
Storage Temperature Range (°C)	<b>-10 to 50</b>
Max. TTL Modulation Freq. (Hz)	<b>20000</b>
Minimum Pulsing Frequency (Hz)	<b>1000, 10000</b>
Modulation Input Signal	<b>0-5 VDC</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.

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Laser Form Factor	<b>Q</b>
Total Power Consumption (W)	<b>75</b>
Max. Power Input Duty Cycle	<b>100%</b>
Cooling Method	<b>TEC/Forced Air</b>
Standard Warranty (months)	<b>12</b>
MTTF (operational hours)	<b>5000</b>
Weight of Product or Laser Head (kg)	<b>4.7</b>
Beam Height from Base Plate (mm)	<b>56</b>
Dimensions of Product or Laser Head (mm)	<b>264 (l) x 224 (w) x 101 (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:

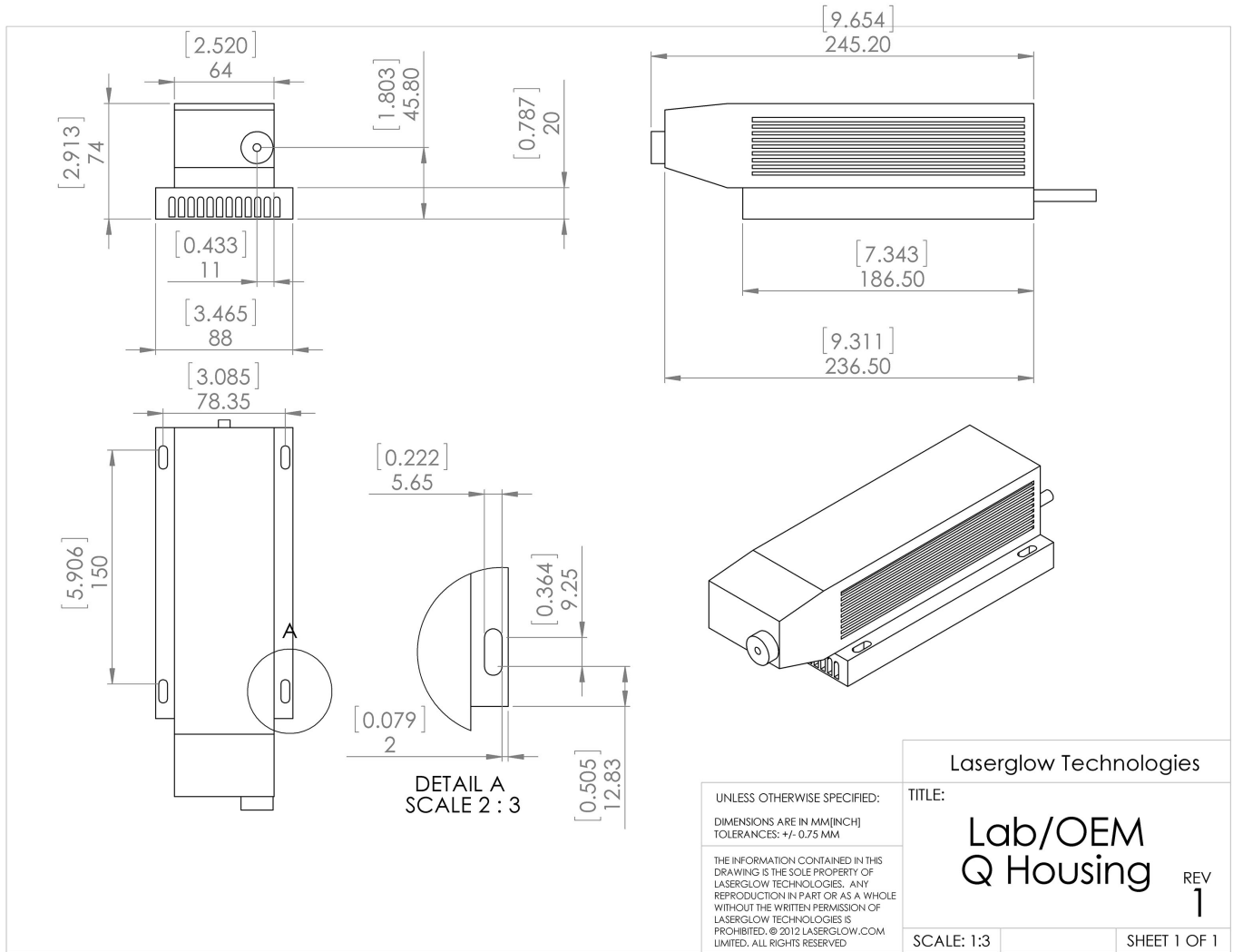
These lasers are available with several different power supply options. The model that you have selected is highlighted below, and any other options are shown for easy reference.

	Power Supply Type:	<b>SF</b>
	Input Power	85v to 264v
	Power Supply Weight (kg)	2.3
	Dimensions (mm)	238 (l) x 146 (w) x 102 (h)

\*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.

**Dimensional Drawing - Laser Form Factor: Q:**



## Accessories:

The most popular accessories for model Q26-Q are shown below. For additional details regarding these or other accessories please see our website or contact us directly.

Part Number	Description	
 ACFUV1HXX	FC/PC Fiber Coupler/Collimator for ultraviolet wavelengths (266 to 399 nm) 11mm diameter input lens Full Details: <a href="http://www.laserglow.com/ACF">www.laserglow.com/ACF</a>	
 ACSUV1HXX	SMA Fiber Coupler/Collimator for ultraviolet wavelengths (266 to 399 nm) 11mm diameter input lens Full Details: <a href="http://www.laserglow.com/ACS">www.laserglow.com/ACS</a>	
 AFF2002XX	Armored Fiber With FC/PC Connectors 200um Core Multimode 2m length Full Details: <a href="http://www.laserglow.com/AFF">www.laserglow.com/AFF</a>	
 AFS2002XX	Armored Fiber With SMA 905 Connectors 200um Core Multimode 2 m length Full Details: <a href="http://www.laserglow.com/AFS">www.laserglow.com/AFS</a>	
 AGF5327XX	LSG-532-NF-7 Fit-Over Safety Goggles 532nm Output: OD 7+ at 190-532 nm CE Certified Full Details: <a href="http://www.laserglow.com/AGF">www.laserglow.com/AGF</a>	

## 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.