

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

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.

Specifications Page 2:


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

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:

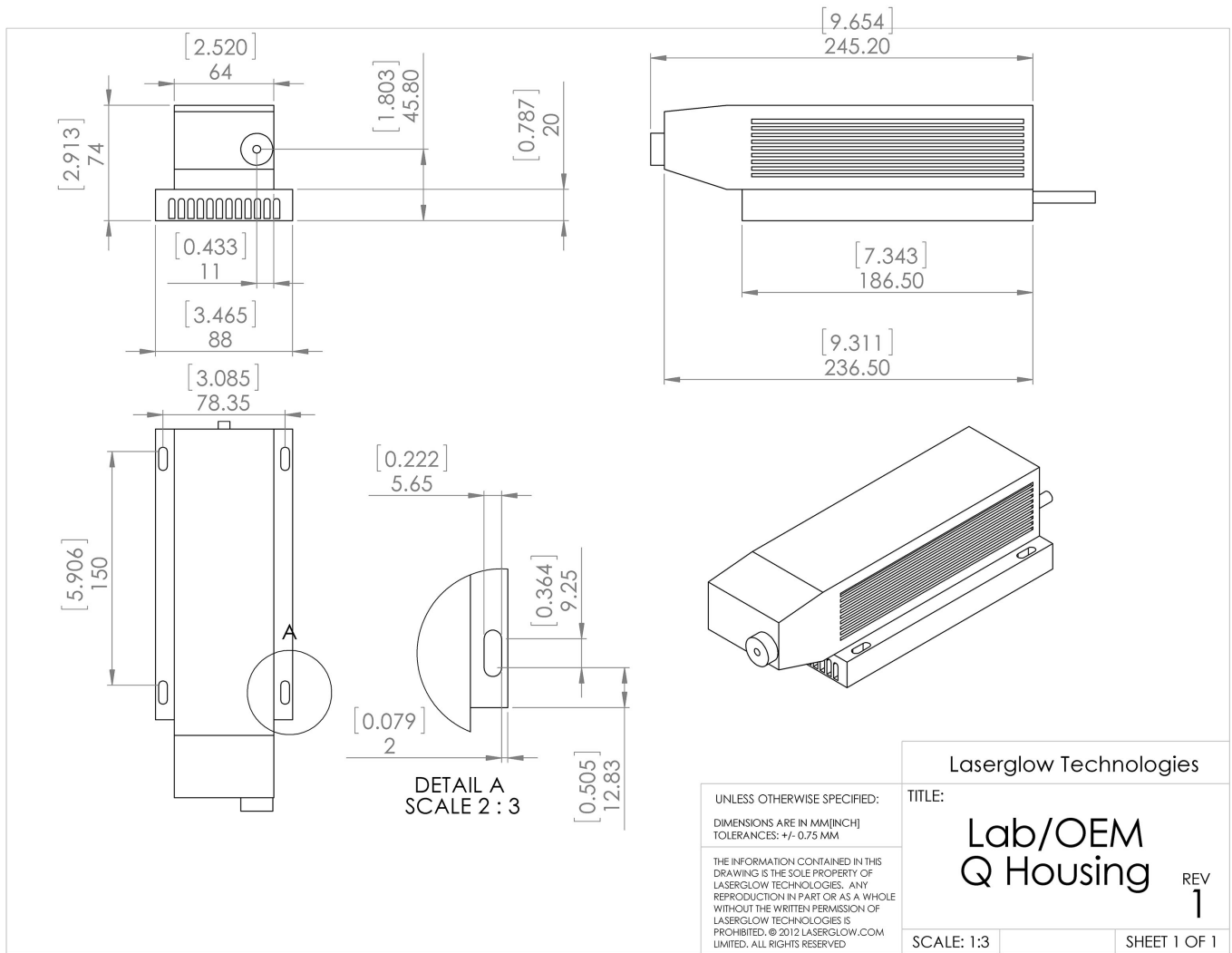
These lasers are available with several different power supply options. The model that you have selected is highlighted below, and any other options are shown for easy reference.

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

FOR MORE INFORMATION PLEASE CONTACT:

LASERGLOW TECHNOLOGIES
99 Ingram Dr. Unit B, North York, ON, Canada M6M2L7
Tel. (416) 729-7976 Fax (716) 322-3510
sales@laserglow.com www.laserglow.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.