

LQS-1573 Passively Q-Switched Laser System



Series Specifications:

Nominal Wavelength	1573 nm
Output Type	Q-Switched
Laser Source Type	DPSS

Overview:

The LQS-1573 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 1573 nm.

These lasers are commonly used for 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 5 μ J - 20 μ J
- Pulse repetition rate of 0.1 Hz - 1 kHz
- Pulse duration of 2 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 QF7-H, per your request, and data for the entire series is also displayed for your reference. The specs which are specific to QF7-H have been highlighted below in **red + bold**.

Laser Form Factor	H
Output Power (mW)	>5, >10, >15, >20
Single Pulse Energy (μ J)	5, 10, 15, 20
Optimal Pulse Frequency (Hz)	1000
Output Power Stability (%RMS/4h)	<1, <3, <5, <10
FDA Safety Class	IV
Wavelength Tolerance (+/- nm)	1
Divergence (mrad, full angle)	<1.5
Beam Dimensions (mm, 1/e ²)	1.5
Transverse Mode	TEM00
Longitudinal Modes	Multiple
Warm-up Time (minutes)	10
Avg. Pulse Duration (ns)	2
Approximate Peak Power (W)	25000
M ²	<1.5
Operating Temperature Range (°C)	10 to 35
Storage Temperature Range (°C)	-10 to 50
Max. TTL Modulation Freq. (Hz)	1000
Minimum Pulsing Frequency (Hz)	0.1
Modulation Input Signal	0-5 VDC
Max. Power Input Duty Cycle	100%
Cooling Method	TEC/Forced Air
Standard Warranty (months)	12
MTTF (operational hours)	10000
Weight of Product or Laser Head (kg)	0.9

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	H
Beam Height from Base Plate (mm)	29
Dimensions of Product or Laser Head (mm)	155 (l) x 77 (w) x 60 (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:	SH
	FDA-Compliant Standard	
	Input Power	85v to 264v
	Power Supply Weight (kg)	2.3
	Dimensions (mm)	238 (l) x 146 (w) x 102 (h)

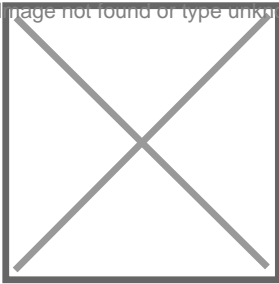
*Power supply may not be exactly as shown, see dimensional drawings on next 2 pages.

*Dimensions for fiber-integrated (I_) include laser head packaged inside.

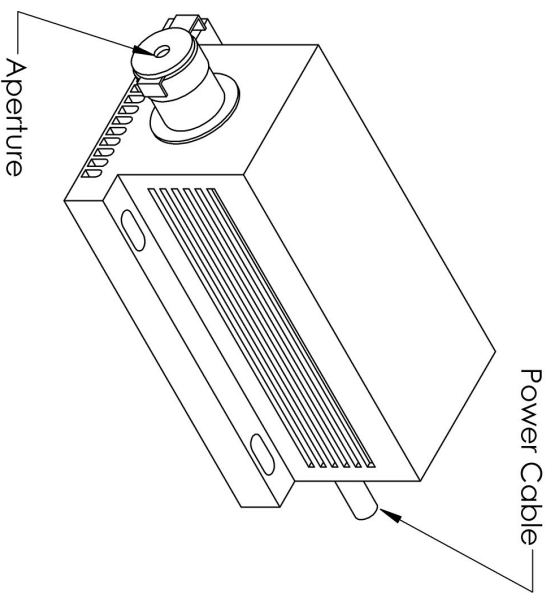
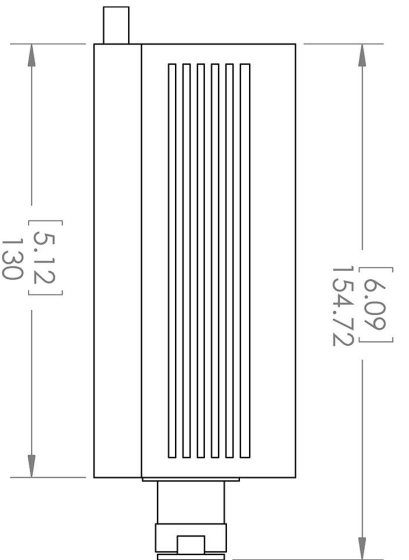
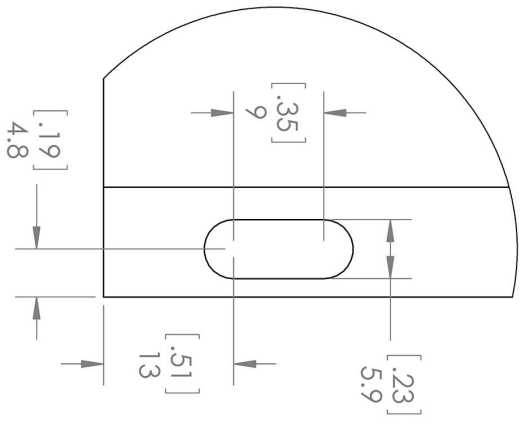
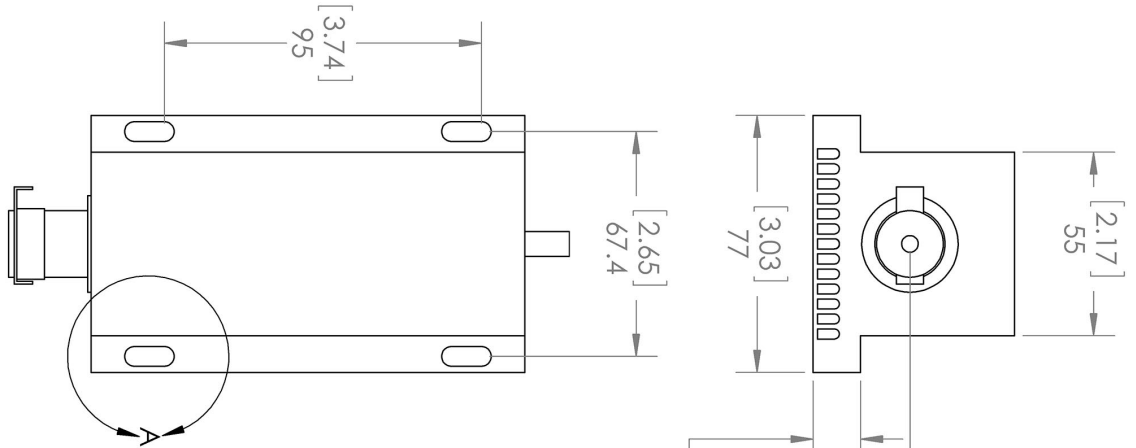
Regulatory Classification:

The model you have selected (QF7-H) requires the following safety label(s):

Image not found or type unknown



Dimensional Drawing - Laser Form Factor: H:



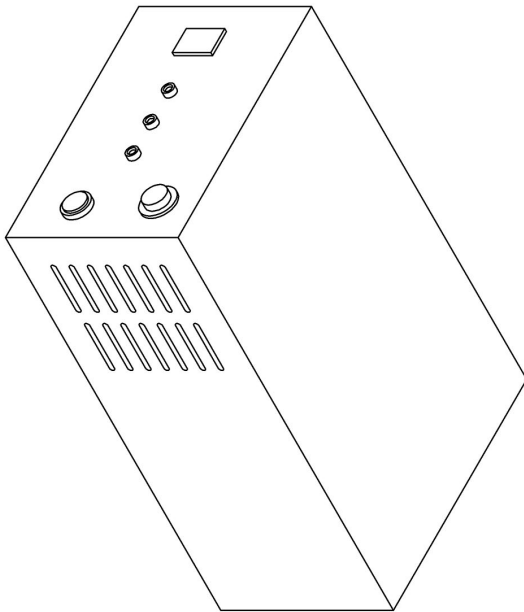
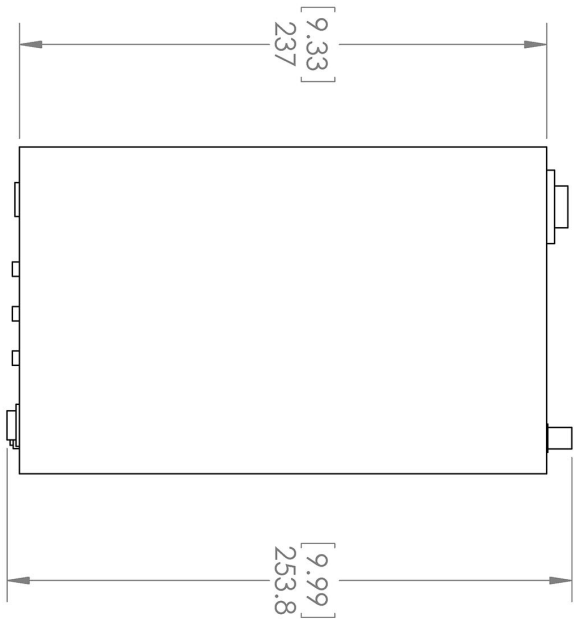
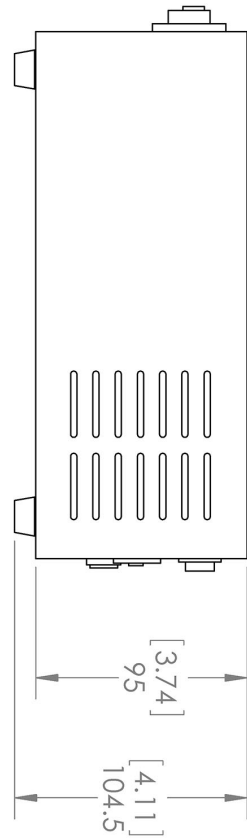
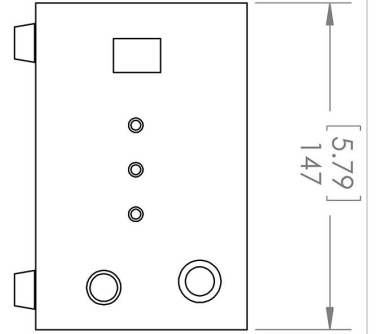
DETAIL A
SCALE 3 : 2

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

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TITLE:		Laserglow Technologies
SCALE: 1:2		SHEET 1 OF 1
<p>Lab/OEM H/T Housing</p> <p>REV 1</p>		

Dimensional Drawing - Power Supply Form Factor: SH:



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

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Laserglow Technologies

TITLE:
Power Supply
SH/SF/SN

REV
1

SCALE: 1:3

SHEET 1 OF 1

Accessories:

The most popular accessories for model QF7-H 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:

LASERGLOW TECHNOLOGIES

873 St. Clair Ave West, Toronto, ON, Canada M6C1C4

Tel. (416) 729-7976 Fax (480) 247-4864

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.