

Arktis Laser Product Datasheet

LWL-0532 Lamp-Pumped Q-Switched DPSS Laser System



Series Specifications:

Nominal Wavelength	532 nm
Output Type	Q-Switched
Laser Source Type	Lamp-Pumped Solid St

Overview:

The LWL-0532 Series of Lamp-Pumped Solid-State Q-Switched Lasers offer extremely high pulse energies in the range of 30mJ to 150mJ. The laser uses an embedded EOM to control the pulse frequency at a fixed rate of 10 Hz. The pulses themselves are extremely short, between 8-10 ns in duration.

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 U53-LT, per your request, and data for the entire series is also displayed for your reference. The specs which are specific to U53-LT have been highlighted below in **red + bold**.


Output Power (mW)	2, 25, 100, >300	>4500
Single Pulse Energy (μJ)	2, 25, 100, 30000	450,000
Optimal Pulse Frequency (Hz)	10	10
Output Power Stability (%RMS/4h)	<1, <3, <5	<3
Central Wavelength (nm)	532	
Wavelength Tolerance (+/- nm)	1	
Divergence (mrad, full angle)	<1.5, <3	<3
Beam Dimensions (mm, 1/e ²)	3, 6	8
Warm-up Time (minutes)	15	
Avg. Pulse Duration (ns)	10	
Approximate Peak Power (W)		45,000,000
Operating Temperature Range (°C)	15 to 35	
Max. TTL Modulation Freq. (Hz)	10	10
Modulation Input Signal	0-5 VDC	0-5 VDC
Max. Power Input Duty Cycle	100%	100%
Standard Warranty (months)	12	12
MTTF (operational hours)		10000
Weight of Product or Laser Head (kg)	14	
Beam Height from Base Plate (mm)	75	80
Dimensions of Product or Laser Head (mm)	568 (l) x 150 (w) x 130 (h)	600 (l) x 245 (w) x 130 (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:	FL
FDA-Compliant Driver 	Input Power	85v to 264v
	Power Supply Weight (kg)	15
	Dimensions (mm)	480 (l) x 465 (w) x 135 (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 (U53-LT) requires the following safety label(s):



Accessories:

The most popular accessories for model U53-LT 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.