

Arktis Laser Product Datasheet

LWS-0532 Water-Cooled Q-Switched DPSS Laser System



Series Specifications:

Nominal Wavelength	532 nm
Output Type	Q-Switched
Laser Source Type	DPSS



Overview:

The LWS-0532 Series of Diode-Pumped Solid-State (DPSS) Q-Switched Lasers are ideal for applications requiring the highest available output in 532 nm. At 10 W to 45 W average output power, this series maintains a high level of long-term output power stability and a long operating lifetime at an aggressively competitive cost.

These lasers are commonly used for fluorescence excitation, PIV, Raman Spectroscopy, laser display and a broad spectrum of other applications including materials processing in the production of PV Solar Cells. The driver is available as a complete FDA-compliant system or as an O.E.M. component with significantly reduced dimensions.

Laserglow products are currently being used by some of the World's top universities and other prominent research facilities.

Key Features:

- Closed Loop Water Cooling - no need for external plumbing connection
- Compact design
- Pulse energy and frequency are user-adjustable
- Efficient DPSS technology runs on standard AC power (85 - 264 V, 47 - 63 Hz)
- >10,000 hours continuous maintenance-free operating life
- FDA CDRH Compliant Class Class IV enclosure
- 48-hour replacement coverage available for an additional fee on specific models

Package Includes:

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

Specifications:

This spec sheet has been generated specifically for part number W53-B, per your request, and data for the entire series is also displayed for your reference. The specs which are specific to W53-B have been highlighted below in **red + bold**.


Output Power (W)	10, 20, 30, 40, 50, 75, 100
Single Pulse Energy (μJ)	1000, 2000, 3000, 4000, 5000, 7500, 10000
Optimal Pulse Frequency (Hz)	10000, 15000
Output Power Stability (%RMS/4h)	<1, <3, <5
Central Wavelength (nm)	531.65
Wavelength Tolerance (+/- nm)	1
Divergence (mrad, full angle)	<3.5
Beam Dimensions (mm, 1/e ²)	7, 12, 15
Warm-up Time (minutes)	10
Avg. Pulse Duration (ns)	100
Beam Pointing Stability (mrad)	<0.05
Operating Temperature Range (°C)	15 to 35
Max. TTL Modulation Freq. (Hz)	100,000
Modulation Input Signal	0-5 VDC
Max. Power Input Duty Cycle	100%
Standard Warranty (months)	12
MTTF (operational hours)	10000
Weight of Product or Laser Head (kg)	15
Beam Height from Base Plate (mm)	65
Dimensions of Product or Laser Head (mm)	426 (l) x 150 (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.

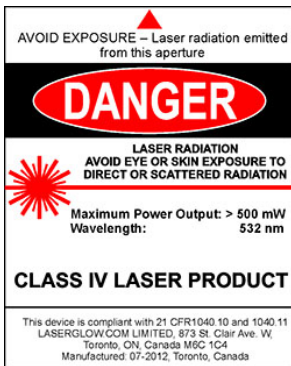
<div>FDA-Compliant LabSpec</div> 	Power Supply Type:	FB
	Input Power	85v to 264v
	Power Supply Weight (kg)	18.5
	Dimensions (mm)	340 (l) x 463 (w) x 221 (h)

*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 (W53-B) requires the following safety label(s):



Accessories:

The most popular accessories for model W53-B are shown below. For additional details regarding these or other accessories please see our website or contact us directly.

Part Number	Description	
 AGF5327XX	LSG-532-NF-7 Fit-Over Safety Goggles 532nm Output: OD 7+ at 190-532 nm CE Certified Full Details: www.arktislaser.com/AGF	

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.