

## 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)                        | <b>2, 25, 100, &gt;300</b>         | >4500                       |
| Single Pulse Energy (μJ)                 | <b>2, 25, 100, 30000</b>           | 450,000                     |
| Optimal Pulse Frequency (Hz)             | <b>10</b>                          | 10                          |
| Output Power Stability (%RMS/4h)         | <b>&lt;1, &lt;3, &lt;5</b>         | <3                          |
| Central Wavelength (nm)                  | <b>532</b>                         |                             |
| Wavelength Tolerance (+/- nm)            | <b>1</b>                           |                             |
| Divergence (mrad, full angle)            | <b>&lt;1.5, &lt;3</b>              | <3                          |
| Beam Dimensions (mm, 1/e <sup>2</sup> )  | <b>3, 6</b>                        | 8                           |
| Warm-up Time (minutes)                   | <b>15</b>                          |                             |
| Avg. Pulse Duration (ns)                 | <b>10</b>                          |                             |
| Approximate Peak Power (W)               |                                    | 45,000,000                  |
| Operating Temperature Range (°C)         | <b>15 to 35</b>                    |                             |
| Max. TTL Modulation Freq. (Hz)           | <b>10</b>                          | 10                          |
| Modulation Input Signal                  | <b>0-5 VDC</b>                     | 0-5 VDC                     |
| Max. Power Input Duty Cycle              | <b>100%</b>                        | 100%                        |
| Standard Warranty (months)               | <b>12</b>                          | 12                          |
| MTTF (operational hours)                 |                                    | 10000                       |
| Weight of Product or Laser Head (kg)     | <b>14</b>                          |                             |
| Beam Height from Base Plate (mm)         | <b>75</b>                          | 80                          |
| Dimensions of Product or Laser Head (mm) | <b>568 (l) x 150 (w) x 130 (h)</b> | 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.

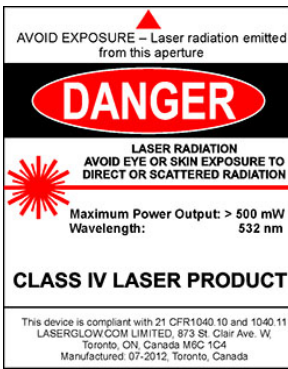
|   |                          |                                    |
|---|--------------------------|------------------------------------|
|   | Power Supply Type:       | <b>FL</b>                          |
| FDA-Compliant Driver<br> | Input Power              | <b>85v to 264v</b>                 |
|   | Power Supply Weight (kg) | <b>15</b>                          |
|   | Dimensions (mm)          | <b>480 (l) x 465 (w) x 135 (h)</b> |

\*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 |  |
|-------------|-------------|--|
|-------------|-------------|--|

**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.