



## DM DH Green Series Lasers

[www.photonix.com](http://www.photonix.com)

### Overview

PI offers any of its DM Series lasers in a Dual Head (DH) configuration. This combines the output from two identical lasers in an external beam combination box allowing the flexibility for the user to adjust the beams. In addition to short temporal pulse separation, this has the advantage of polarization, energy, and/or alignment independence. The Dual Head enables control of spatial and temporal beam overlap and independent control of energy

In addition, the two lasers can be triggered independently or simultaneously. What is sacrificed in compactness is gained in user flexibility.

### Features

- ❖ Repetition rate from:
  - Single shot to 10kHz for YLF
  - 1kHz to 30kHz for DM60/100 YAG
  - 1 to 50kHz for DM150/200 YAG
- ❖ Reliable diode pumped technology
- ❖ Proven industrial 24/7 reliability
- ❖ Compact form factor
- ❖ Output at 532nm or 527nm
- ❖ Excellent energy stability for reduced noise
- ❖ Beam profile optimized for homogenous illumination and light sheet generation
- ❖ Optimized for PIV performance
- ❖ Highest energy per pulse for more illumination
- ❖ Comparable pulses for perfect correlation
- ❖ Quad Pulse - up to 4 pulses from a single trigger signal.
- ❖ Internal attenuator option



# System Specifications

Specifications	Model
	DM25-527-DH
<b>Output Characteristics</b>	
Wavelength (nm)	527
Pulse Energy (mJ) at 1kHz*	50
Pulse Width (ns) at 1kHz**	~170
Repetition Rate	Single shot to 10 kHz
Pulse to Pulse Stability**	< 0.5% rms
Long Term Stability	0.5% rms
<b>Beam Characteristics</b>	
Beam Diameter (nominal)**	5.0 mm
Beam Divergence**	8.0 mrad (nominal)
Beam Circularity**	> 85%
Spatial Mode (M2)**	~13 to 18
Beam Pointing Stability**	< 25 urad
<b>Operating Specifications</b>	
Interface	RS 232 / External TTL Triggering / GUI Software included
Warm-up Time	< 5 min from standby or cold start
Electrical Requirement	100 to 240 V
Line Frequency	50 to 60 Hz
Power Consumption	~2 kW
Ambient Temperature	15 to 30 °C
<b>Physical Characteristics</b>	
Dimensions of Laser Head	12 in x 26 in x 4.6 in <sup>†</sup> (WxLxH)
Dimensions of Controller	16 in <sup>††</sup> x 16 in x 3.5 in (2U) (WxLxH)
Weight of Laser Head	~85 lbs
Weight of Controller	~20 lbs
Umbilical Length	3 m

\* 2 heads combined

\*\* Each individual head

† Includes height of desiccant (0.35")

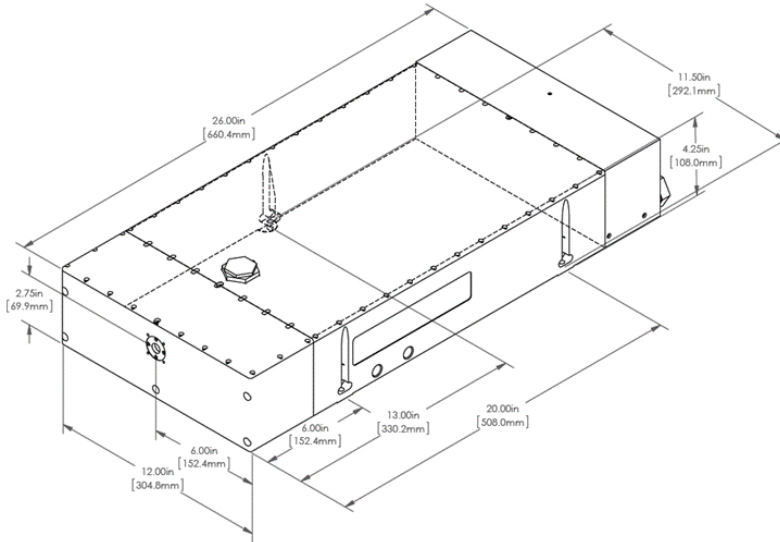
†† Not including rack mount option (total width w/ rack mount option = 19.0")



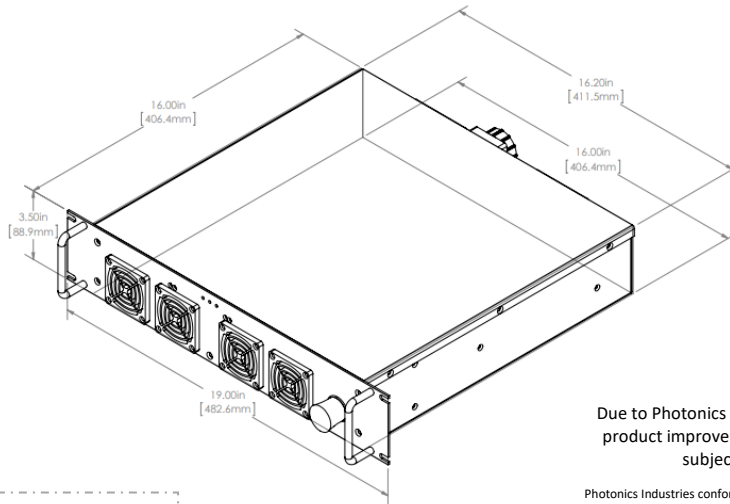
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# Dimensional Drawings

## DM20/25/30/40, 50/60-527 Laser Head



## DM20/25/30/40, 50/60 & 100-527 Controller



19" mount option depicted here in drawing and not depicted in photo on the first page.

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