



DMX Dual Head Green Series Lasers

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Overview

PI offers any of its DMX Series lasers in a Dual Head (DH) configuration. This combines the output from two identical lasers 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 DMX60/100 YAG
 - 1 to 50kHz for DMX150/200 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

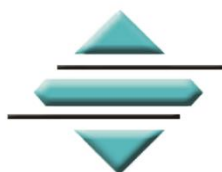
Specifications	Model					
	DMX20-527-DH	DMX30-527-DH	DMX40-527-DH	DMX50-527-DH	DMX60-527-DH	DMX100-527-DH
Output Characteristics						
Wavelength (nm)	527					
Average Power (W) at 3kHz*	60	90	120	150	180	300
Pulse Energy (mJ) at 1kHz*	40	60	80	100	120	200
Pulse Width (ns) at 1kHz**	~170	150	130	~120		
Repitition Rate	Single shot to 10 kHz					0.5 kHz to 10 kHz
Pulse to Pulse Stability**	< 0.5% rms					< 0.75% rms
Long Term Stability	0.5% rms					
Beam Characteristics						
Beam Diameter (nominal)**	5.0 mm					7.0 mm
Beam Divergence**	8.0 mrad (nominal)					
Beam Circularity**	> 85%					
Spatial Mode (M2)**	~13 to 18					
Beam Pointing Stability**	< 25 urad					
Operating Specifications						
Interface	RS 232 + External TTL Triggering + GUI Software included					
Warm-up Time	< 5 min from standby or cold start					
Electrical Requirement	200 to 240 V					
Line Frequency	50 to 60 Hz					
Power Consumption	1.6/2.0/3.2 kW			3.4/3.6 kW		4.6 kW
Ambient Temperature	15 to 30 °C					
Physical Characteristics						
Dimensions of Laser Head	11 in x 26 in x 4.6 in† (WxLxH)					18.5 in x 27 in x 4.25 in
Dimensions of Power Supply	16.2 in†† x 16 in x 3.5 in (2U) (WxLxH)					
Weight of Laser Head	~85 lbs					200 lbs
Weight of Power Supply	~20 lbs					
Cable Length	Standard 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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System Specifications

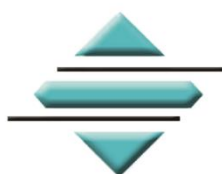
Specifications	Model			
	DMX60-532-DH	DMX100-532-DH	DMX150-532-DH	DMX200-532-DH
Output Characteristics				
Wavelength (nm)	532			
Average Power (W) at 10kHz*	120	200	300	400
Pulse Energy (mJ) at 10kHz*	12	20	30	40
Pulse Width (ns) at 10kHz**	~190	~130	~200	~110
Repetition Rate	1 kHz to 30 kHz		1 kHz to 50 kHz	
Pulse to Pulse Stability**	< 1.0% rms			
Long Term Stability	< 0.5% rms			
Beam Characteristics				
Beam Diameter (nominal)**	~ 3.0 mm		~ 4.5 mm	
Beam Divergence**	< 9 mrad		10 mrad	
Beam Circularity**	> 85%			
Spatial Mode (M2)**	~ 15	~ 20 to 25††	~ 15	
Beam Pointing Stability**	< 25 urad			
Operating Specifications				
Interface	RS 232 + External TTL Triggering + GUI Software included			
Warm-up Time	< 5 min from standby or cold start			
Electrical Requirement	200 to 240 V			
Line Frequency	50 to 60 Hz			
Power Consumption	3.0/3.5 kW		4.5/5.0 kW	
Ambient Temperature	15 to 30 °C			
Physical Characteristics				
Dimensions of Laser Head	11 in x 26 in x 4.6 in† (WxLxH)		18.5 in x 27 in x 4.25 in	
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†† M2 ~ 15 option is available

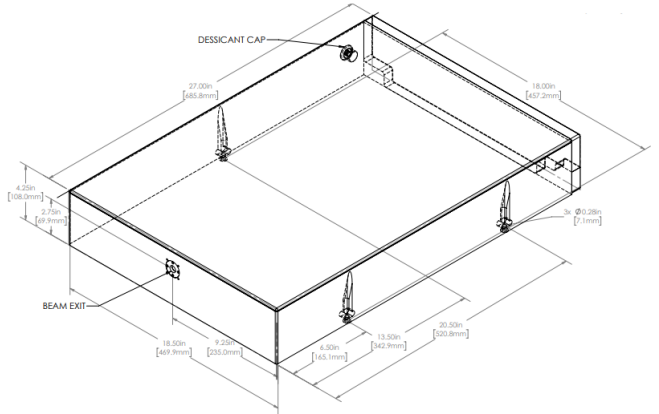
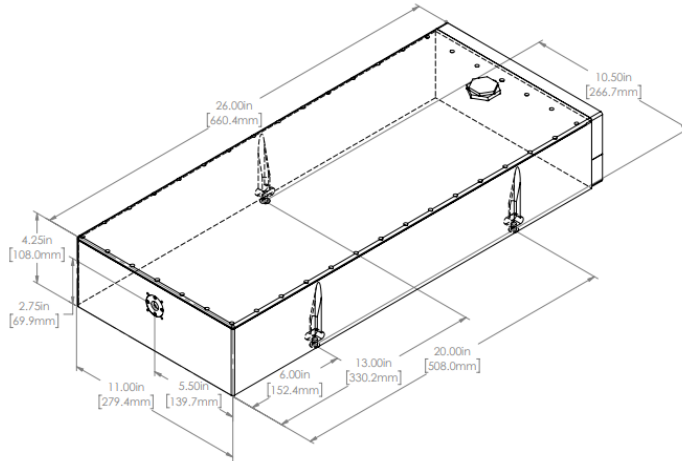


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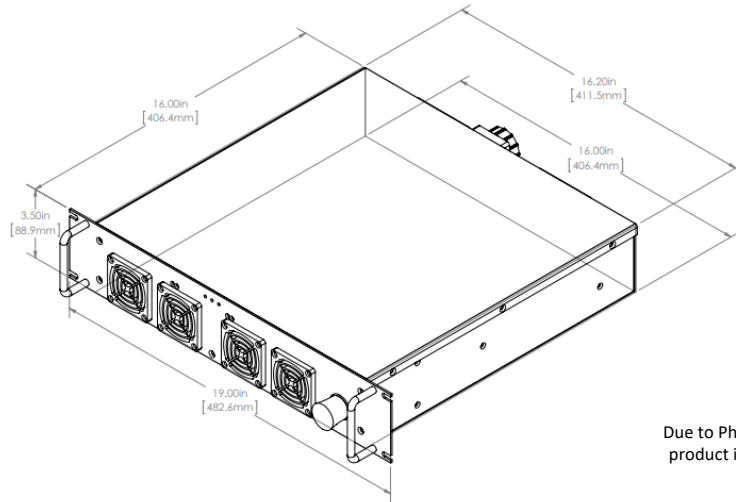
Dimensional Drawings

DMX20/30/40/50/60-527-DH & DMX60/100-532-DH Laser Head (Left)

DMX100-527-DH & DMX150/200-532-DH Laser Head (Right)



DMX-DH Power Supply



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

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