



High Energy Lamp Pumped Solid State Q-Switched Laser LPQA Series

Data Sheet

Overview

The LPQA series is a line of high energy lamp-pumped solid-state Q-switched laser that deliver single pulse energy up to 200mJ. The laser series features high single pulse energy, short pulse duration, high peak power and without water cooling machine. The laser is widely used in LIBS, LIF, PIV, ICP-MS, LCD repair, scientific research, laser processing, military, and many other applications.

Features

- Available wavelengths: 532nm and 1064nm
- Q-switched operating mode
- Pulse energy 30mJ to 200mJ
- Pulse duration <10ns, <12ns
- Repetition rate 1-10Hz

Applications

- LIBS
- LIF
- PIV
- ICP-MS
- LCD repair
- Scientific research
- Laser processing
- Military

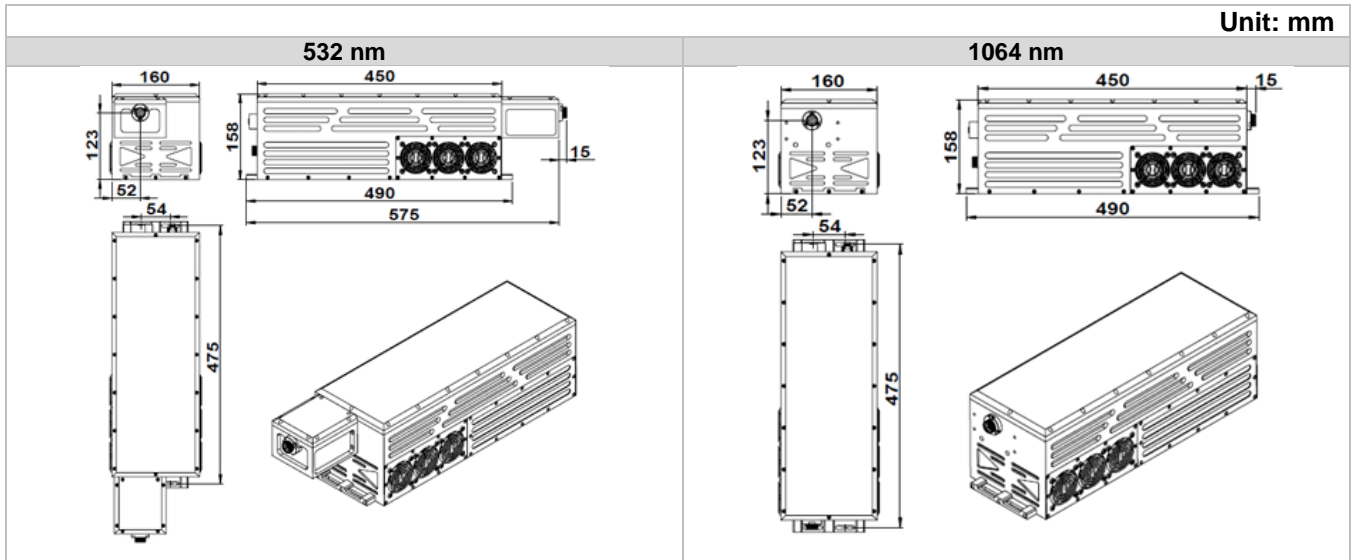
532-1064 nm Specifications

Parameter	LPQA532				LPQA1064			
	Wavelength	532±1 nm				1064±1 nm		
Operating mode	Q-switched: EOM (Electro-optic modulation)				Q-switched: EOM (Electro-optic modulation)			
Single pulse energy	~30 mJ	~50 mJ	~80 mJ	~100 mJ	~50 mJ	~100 mJ	~150 mJ	~200 mJ
Pulse duration	<12 ns	<12 ns	<10 ns	<10 ns	<10 ns	<10 ns	<10 ns	<10 ns
Repetition rate	1~10 Hz (adjustable)				1~10 Hz (adjustable)			
Energy stability	<5%, <3%				<5%, <3%, <2%			
Beam divergence, full angle	~1.5 mrad	~1 mrad	~1 mrad	~1 mrad	~2 mrad	~1 mrad	~1 mrad	~1 mrad
Beam diameter	<6 mm	<6 mm	7 mm	7 mm	<6 mm	<6 mm	7 mm	7 mm
Warm-up time	<15 min							
Cooling method	Water to Air Cooled							
Operating temperature	20-25°C							
Expected lifetime	10 ⁷ -10 ⁸ pulses							
Warranty period	10 months							

Remarks:

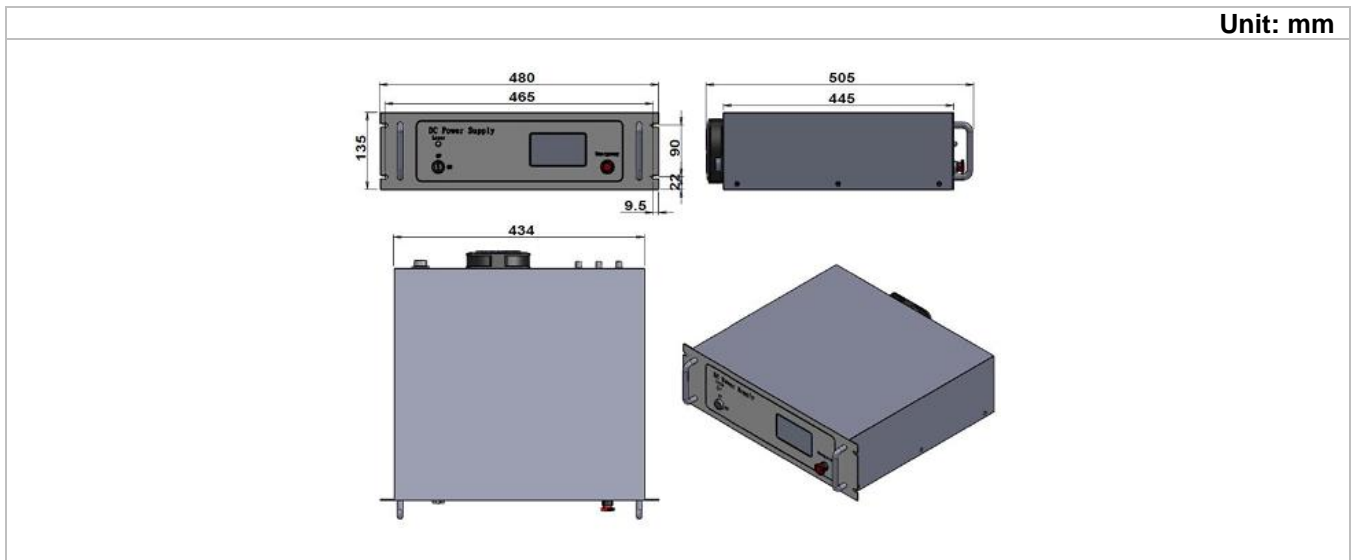
- Specifications of the Q-switched pulsed laser is based on the laser pulsed at the specified repetition rate. If the laser is run at a different repetition rate, the output characteristics may change.
- Specifications are subject to change without notice.

LPQA Series Laser Head Dimensions



Parameter	532 nm	1064 nm
Dimensions	575(L) x 160(W) x 160(H) mm ³	490(L) x 160(W) x 153(H) mm ³
Weight	15 kg	15 kg
Beam height from base plate	123 mm	123 mm
Beam exit (from side)	52 mm	52 mm

LPQA Series Power Supply Dimensions



Parameter	LPQA Power Supply
Dimensions	480(L) x 505(W) x 135(H) mm ³
Weight	15 kg
Input voltage	220/110VAC
Feature	Repetition rate and voltage can be adjusted by touch screen.

Ordering Information

For more information, please contact Lasermate directly at sales@lasermate.com.

Part Number Configuration LPQA[1][2]LA[3]				
LPQA = Laser Model Series	[1] = Wavelength	[2] = Single Pulse Energy	LA = Power Supply	[3] = Energy Stability
	532= 532nm 1064= 1064nm	30= 30mJ 50= 50mJ 80= 80mJ 100= 100mJ 150= 150mJ 200= 200mJ		A= <5% E= <3% 2= <2% D= <1%

Note: The above specifications are subject to change without notice.