



High Energy DPSS Q-Switched Laser

QEOA Series

Data Sheet



Overview

The QEOA series is a family of high energy diode-pumped solid-state (DPSS) Q-switched EOM (Electro-Optic Modulation) lasers that can provide single pulse energies up to 10mJ. The laser is constructed with features of high single pulse energy, short pulse duration, and high peak power. The QEOA 532/1064nm series laser is widely used in LIBS, LIF, PIV, ICP-MS, LCD repair, scientific research, laser processing, military, and many other applications. The QEOA 1573nm series is widely used in measurement, remote sensing, scientific visualization, research, and many other applications.

Features

- Available wavelengths: 532nm, 1064nm and 1573nm
- Q-switched operating mode
- Pulse energy 1mJ to 10mJ
- Pulse duration <10ns
- Repetition rate 1-10Hz

Applications

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

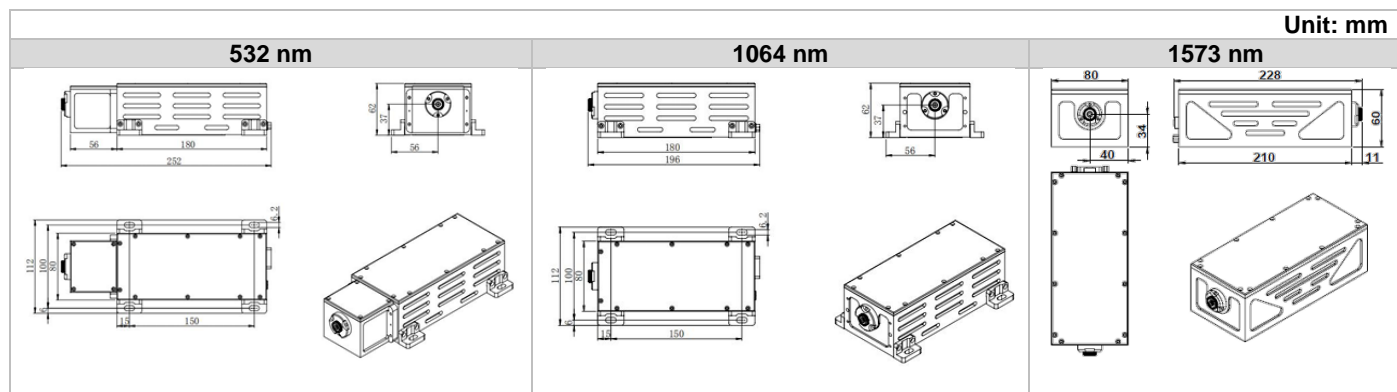
532-1573 nm Specifications

Parameter	QEOA532	QEOA1064	QEOA1573
Wavelength	532±1 nm	1064±1 nm	1573±1 nm
Operating mode	Q-switched: EOM (Electro-optic Modulation)		
Pulse energy	~5 mJ	~5 mJ, ~10 mJ	~1 mJ, ~2 mJ
Pulse duration	<10 ns	<10 ns	<10 ns
Repetition rate	1-10 Hz, EXT (adjustable)	1-10 Hz, EXT (adjustable)	1-10 Hz, EXT (adjustable)
Energy stability	<5%, <3%	<5%, <3%, <2%	<5%, <3%
Beam divergence, full angle	<3 mrad	<3 mrad	≤8 mrad
Beam diameter	~3 mm		
Warm-up time	<15min		
Operating temperature	15-30°C		
Cooling method	Conduction cooled	Conduction cooled	Air cooled
Expected lifetime	10 ⁹ pulses		
Warranty period	10 months		

Remarks:

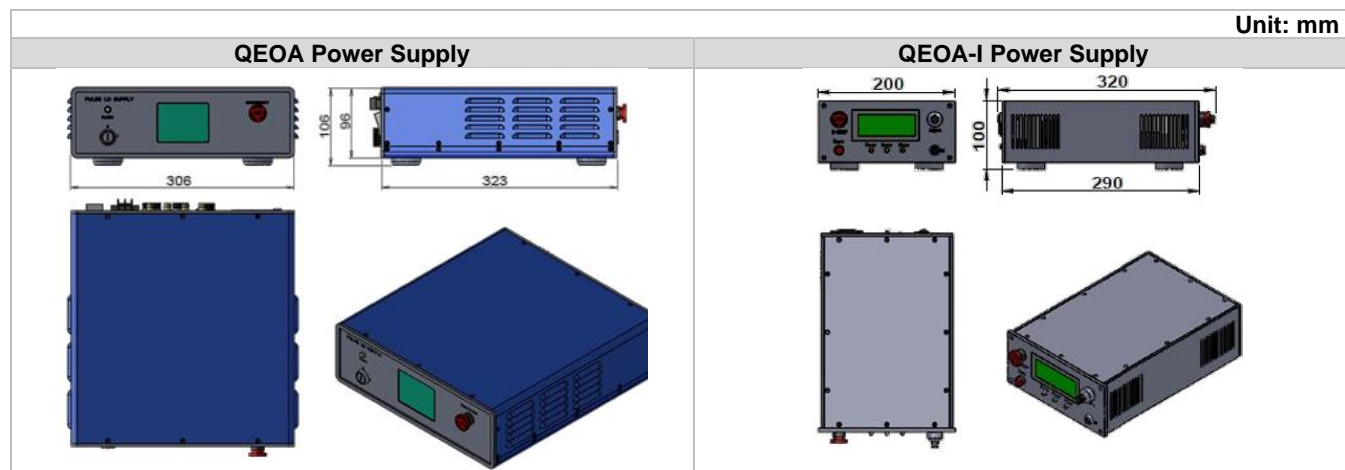
- Specifications of the Q-switched pulsed laser is based on the laser pulsed at the specified repetition rate. If the laser is run at a different repetition rate, the output characteristics may change.
- The above specifications are subject to change without notice.

QEOA Series Laser Head Dimensions



Parameter	532 nm	1064 nm	1573 nm
Dimensions	252(L) × 112(W) × 62(H) mm ³	196(L) × 112(W) × 62(H) mm ³	228(L) × 80(W) × 60(H) mm ³
Weight	2.5 kg	1.5 kg	1.5 kg
Beam height from base plate	37 mm	37 mm	34 mm
Beam exit (from side)	56 mm	56 mm	40 mm

QEOA Series Power Supply Dimensions



Parameter	QEOA Power Supply	QEOA-I Power Supply
Dimensions	323(L) × 306(W) × 106(H) mm ³	320(L) × 200(W) × 100(H) mm ³
Weight	2.5 kg	2.5 kg
Input voltage	220V AC	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 QEOA[1][2][3][4]				
QEOA = Laser Model Series	[1] = Wavelength	[2] = Single Pulse Energy	[3] = Power Supply	[4] = Power Stability
	532= 532nm 1064= 1064nm 1573= 1573nm	1= 1mJ 2= 2mJ 3= 3mJ 5= 5mJ 10= 10mJ	DA= QEOA Power Supply DAI= QEOA-I Power Supply	A= <5% E= <3% 2= <2%

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