



Mode-Locked Picosecond Pulsed Laser MLPS Series

Data Sheet



Overview

The MLPS series is a line of UV, visible, and near IR mode-locked picosecond pulsed lasers that can deliver output levels up to 8000mW. The laser is constructed with features of short pulse duration, high repetition rate and good beam quality. The laser is commonly used in laser medical treatment, industrial processing, and many other applications.

Features

- Available in four different wavelengths at 266nm, 355nm, 532nm and 1064nm
- Mode-locked operating mode
- Output power 10mW to 8000mW
- Pulse duration 10-20ps
- Repetition rate 48+/-1MHz

Applications

- Laser medical treatment
- Industrial processing

266-1064 nm Specifications

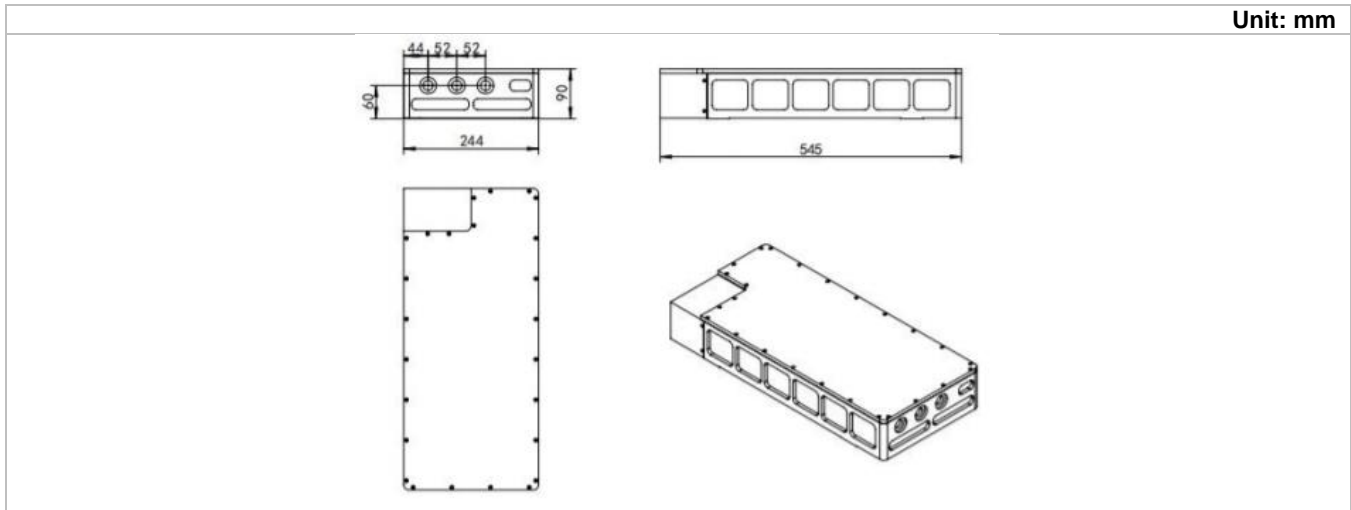
Parameter	MLPS266	MLPS355	MLPS532	MLPS1064
Wavelength	266±1 nm	355±1 nm	532±1 nm	1064±1 nm
Operating mode	Mode-locked	Mode-locked	Mode-locked	Mode-locked
Output power at Mode-locked mode	>10 mW, >20 mW, >30 mW, >50 mW	>100 mW, >300 mW, >500 mW, >1000 mW	>100 mW, >200 mW, >300 mW, >500 mW, >800 mW, >1000 mW	>1000 mW, >2000 mW, >4000 mW, >6000 mW, >8000 mW
Transverse mode	TEM ₀₀	TEM ₀₀	TEM ₀₀	TEM ₀₀
Power stability (rms, over 4 hours)	<5%, <3%	<5%, <3%	<5%, <3%	<5%, <3%
Pulse duration	10-20 ps	10-20 ps	10-20 ps	10-20 ps
Repetition rate	48±1 MHz	48±1 MHz	48±1 MHz	48±1 MHz
Beam diameter at aperture	~3 mm	~3 mm	~1.5 mm	~1.5 mm
Beam divergence, full angle	<4 mrad	<4 mrad	<3 mrad	<3 mrad
Warm-up time	<20min	<20min	<10min	<10min
Operating temperature	10-30°C	10-30°C	10-30°C	10-30°C
Expected lifetime	10,000 hours	10,000 hours	10,000 hours	10,000 hours
Warranty period	10 months	10 months	10 months	10 months

Remarks:

- Specifications of the 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.

MLPS Series Laser Head Dimensions

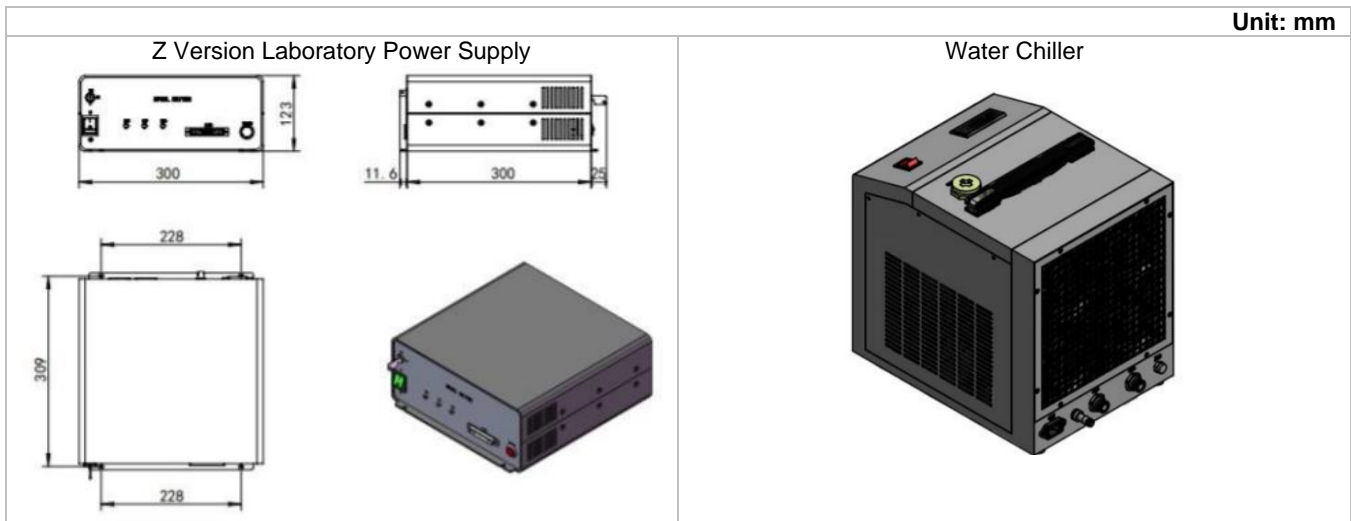
Unit: mm



Parameter	MLPS Series
Dimensions	545(L)×244(W) ×90(H) mm ³
Weight	19 kg
Beam height from base plate	60 mm

MLPS Series Power Supply and Chiller Dimensions

Unit: mm



Parameter	Z Version Laboratory Power Supply	Chiller
Dimensions	300(L) x300(W) x123(H) mm ³	369(L)×350(W) x347(H) mm ³
Weight	6.2 kg	22 kg
Input voltage	90-240VAC	

Ordering Information

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

Part Number Configuration MLPS[1][2][3][4][5]					
MLPS = Laser Model Series	[1] = Wavelength	[2] = Output Power	[3] = Power Supply	[4] = Power Stability	[5] = Water Chiller
	266=266nm 355=355nm 532=532nm 1064=1064nm	10= >10mW 20= >20mW 30= >30mW 50= >50mW 100= >100mW 200= >200mW 300= >300mW 500= >500mW 800= >800mW 1W= >1000mW 2W= >2000mW 4W= >4000mW 6W= >6000mW 8W= >8000mW	Z= Z Version Laboratory Power Supply	A=<<5% E=<<3%	Blank= None C= Water Chiller Included

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