



# Mode-Locked Picosecond Pulsed Laser

## MLPT Series

Data Sheet



### Overview

The MLPT series is a mode-locked picosecond pulsed laser at 1064nm wavelength and can deliver output levels up to 300mW. The laser is constructed with SESAM technique, and with features of short pulse duration, high repetition rate and good beam quality. The laser is commonly used in laser seed source, nonlinear optics, spectrum analysis, photonic crystal micro processing, optical film micro processing, and many other applications.

### Features

- 1064nm wavelength
- Mode-locked operating mode
- Output power 100mW to 300mW
- Pulse duration 10-20ps
- Repetition rate 80+/-1MHz

### Applications

- Laser seed source
- Nonlinear optics
- Spectrum analysis
- Photonic crystal micro-processing
- Optical film micro-processing

**1064nm Specifications**

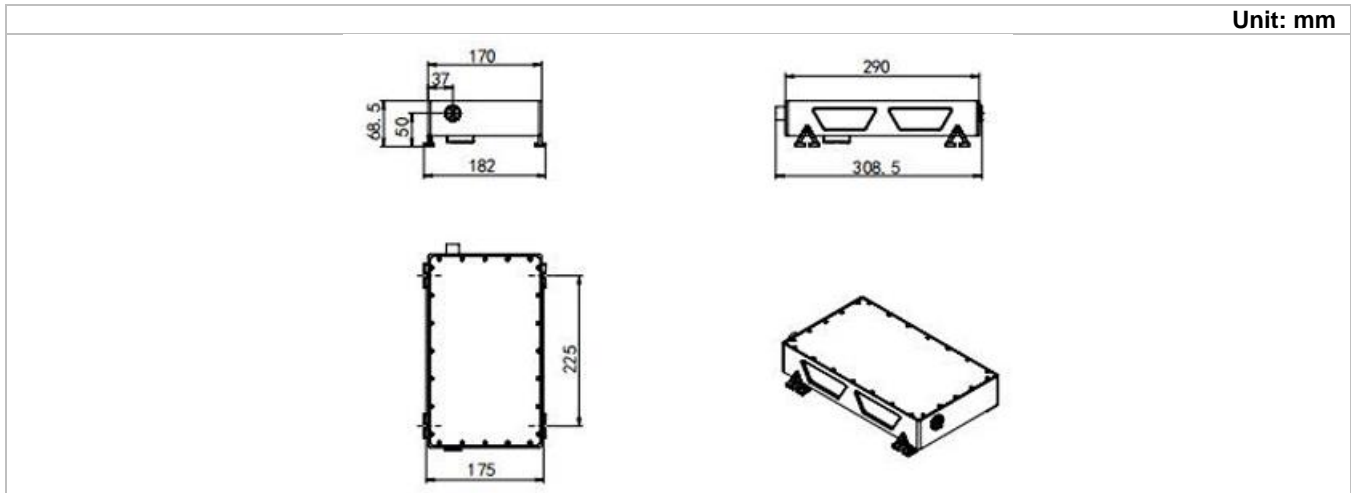
Parameter	MLPT1064
Wavelength	1064±1 nm
Operating mode	Mode-locked
Output power at Mode-locked mode	>100 mW, >200 mW, >300 mW
Transverse mode	TEM <sub>00</sub>
Power stability (rms, over 4 hours)	<5%, <3%
Pulse duration	10-20 ps
Repetition rate	80±1 MHz
Polarization ratio	>100:1
M <sup>2</sup> factor	1.2
Beam diameter at aperture (1/e <sup>2</sup> )	~2 mm
Beam divergence, full angle	<2.0 mrad
Warm-up time	<10min
Operating temperature	10-30°C
Expected lifetime (hours)	10,000
Warranty period	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.

**MLPT Series Laser Head Dimensions**

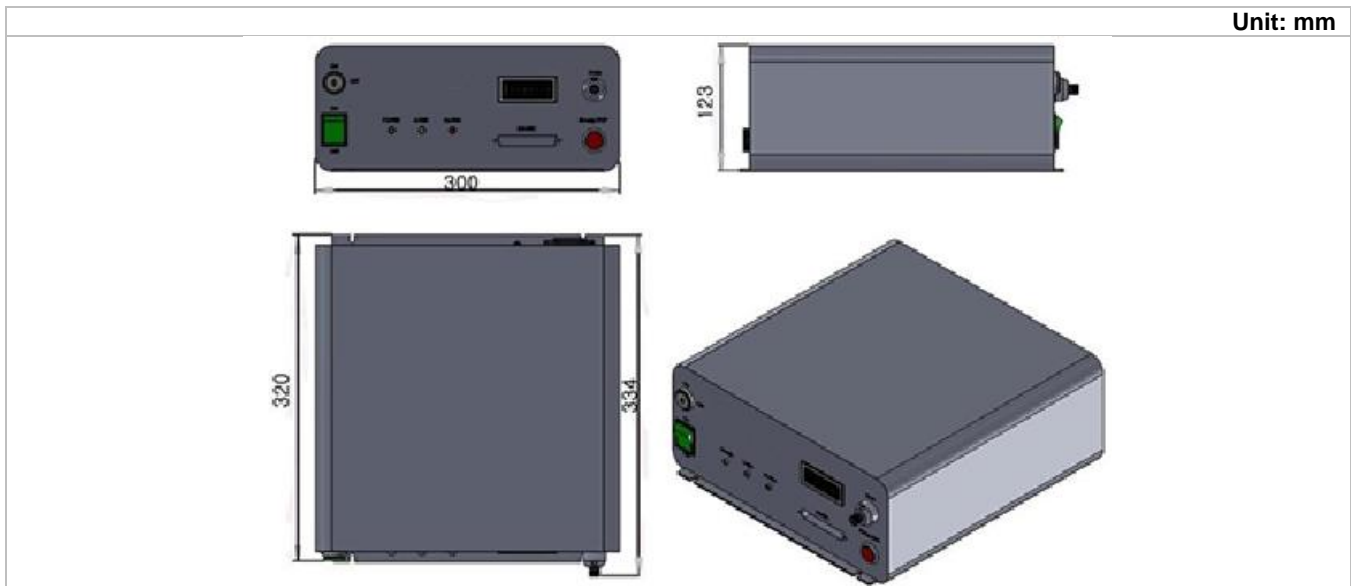
Unit: mm



Parameter	MLPT Series
Dimensions	308.5(L)×182(W) ×68.5(H) mm <sup>3</sup>
Weight	8 kg
Beam height from base plate	50 mm

**MLPT Series Power Supply Dimensions**

Unit: mm



Parameter	Z Version Laboratory Power Supply
Dimensions	320(L) ×300(W) ×123(H) mm <sup>3</sup>
Weight	6.2 kg
Input voltage	90-240VAC

## Ordering Information

For more information, please contact Lasermate directly at [sales@lasermate.com](mailto:sales@lasermate.com).

Part Number Configuration MLPT[1][2][3][4]				
MLPT = Laser Model Series	[1] = Wavelength	[2] = Output Power	[3] = Power Supply	[4] = Power Stability
	1064=1064nm	100= >100mW 200= >200mW 300= >300mW	Z= Z Version Laboratory Power Supply	A=<5% E=<3%

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