

## 2 Micron Mode-Locked Fiber Laser

### AP-ML2

This ultrafast fiber laser at the wavelength of 2  $\mu\text{m}$  offers high pulse energy in the femtosecond regime, providing new capabilities and enabling new discoveries for the scientists and engineers in laser related research and industry applications.

With their compact size, high efficiency, low maintenance, and ease of operation, AdValue Photonics' 2 $\mu\text{m}$  fiber lasers provide many advantages over traditional bulk Holmium and Thulium solid state lasers.

#### Applications:

- Nonlinear optics studies
- Mid-IR generation
- Spectroscopy
- Micromachining



#### Features:

- High pulse energy
- High peak power
- Near diffraction limited beam quality
- Turn-key system with no maintenance required

#### Optical Characteristics:

Parameter	Specification
Operating wavelength	1.95 $\pm$ 0.05 $\mu\text{m}$
Pulse width	800 fs with external pulse compressor (shorter or longer pulse width available)
Pulse energy	10 $\mu\text{J}$ (higher or lower pulse energy available)
Pulse repetition rate	100-500 kHz (non-adjustable, factory selectable)
Average power	3 W nominal
Output polarization	Random
Beam quality, $M^2$	< 1.3
Output delivery	Free-space collimated beam $\sim$ 3 mm diameter (beam expansion available)

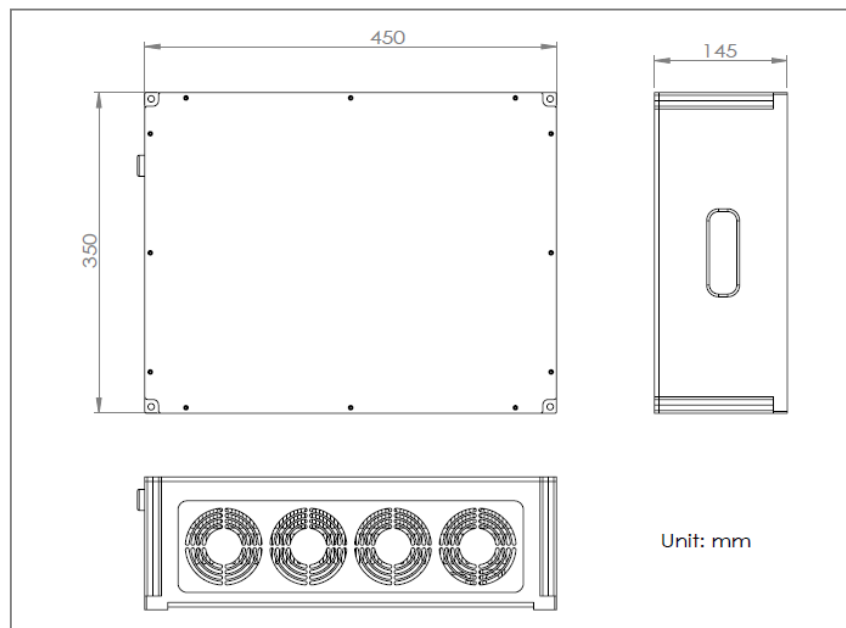
(For special requirement, please contact AdValue Photonics for options.)

*Specifications subject to change without notice*

## General Characteristics:

Parameter	Specification
Operating temperature	+18 to +30 °C
Storage temperature	-10 to +70 °C
Cooling	Forced air
Power requirement	AC 100~240 V (50/60Hz)
Warm-up time	10 minutes
Package dimensions	450(W) x 350(D) x 145(H) mm (optical module only, not including a separate control unit)

## Mechanical Outline:



## Ordering Information:

Part Number:	AP-ML2	-	xxxx	-	xxx	-	xxx	-	xx
			Operating Wavelength: 1950 = 1.95±0.05 μm		Pulse Energy: 010 = 10 μJ		Rep. Rate: 100 = 100 kHz 500 = 500 kHz		Polarization: RP = random polarization



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