

## Pulsed Single-Frequency Fiber Laser

### AP-P-SF-1550

The pulsed single-Frequency fiber laser is designed to provide the highest pulse energy in a single longitudinal mode, a powerful capability for research and industry applications.

With their compact size, high efficiency, low maintenance, and ease of operation, AdValue Photonics' fiber lasers provide many advantages over traditional bulk solid state lasers.

#### Applications:

- LIDAR
- Frequency conversion
- Mid-IR generation
- Spectroscopy

#### Features:

- Single longitudinal mode
- High pulse energy
- Customizable operating wavelength
- Nanosecond pulses
- Near diffraction limited beam quality
- Turn-key system with no maintenance required



#### Optical Characteristics:

Parameter	Specification
Operation mode	Pulsed
Spectral linewidth	Single Frequency (single longitudinal mode)
Typical operating wavelength	1.55 $\mu\text{m}$
Pulse energy	Up to 1 mJ
Pulse width	2 ns to 300 ns (non-adjustable, factory selectable)
Pulse repetition rate	1 kHz to 10 kHz (non-adjustable, factory selectable)
Max. average power	Up to 10 W
Beam quality, $M^2$	< 1.2
Output polarization	Linear Polarization
Output delivery	Free-space collimated beam $\sim$ 1 mm diameter (beam expansion available)

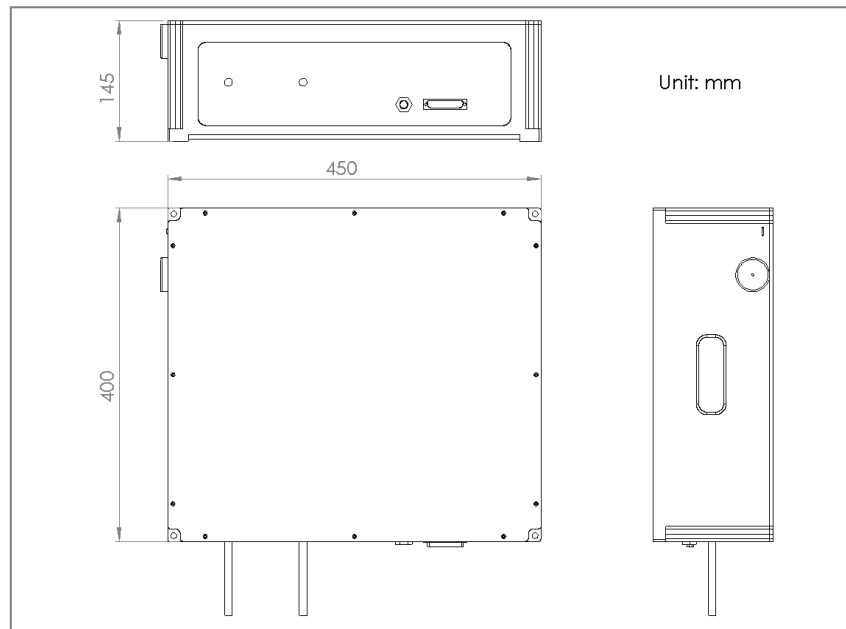
(For special requirement, please contact AdValue Photonics for options.)

*Specifications subject to change without notice*

## General Characteristics:

Parameter	Specification
Operating temperature	10 to +35 °C
Storage temperature	-10 to +70 °C
Cooling	Water cooled
Power requirement	AC 100~240 V (50/60Hz)
Warm-up time	10 minutes
Package dimensions	450(W) x 400(D) x 145(H) (optical module only, not including a separate control unit)

## Mechanical Outline:



## Ordering Information:

AP-P-SF	-	xxxx	-	xxxx or xx	-	xxx	-	xxx	-	xx
		Standard Wavelength: 1550 = 1.55 μm		Pulse Energy: 050 = 50 μJ 500 = 500 μJ m001 = 1 mJ		Pulse Width: 005 = 5 ns 100 = 100 ns		Pulse Rep Rate: 001 = 1 kHz 010 = 10 kHz		Polarization: LP = linear polarization



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