

# **Pulsed Single-Frequency Fiber Laser**

# **AP-P-SF**

(Wavelength: 1 µm, 1.55 µm, 2 µm)

The pulsed single-Frequency fiber lasers are designed to provide the highest pulse energy in a single longitudinal mode. This series of products at 2  $\mu$ m, 1.55  $\mu$ m, and 1  $\mu$ m provide new capabilities to 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					
	AP-P-SF-1950	AP-P-SF-1550	AP-P-SF-1060			
Operation mode	Pulsed					
Spectral linewidth	Single Frequency (single longitudinal mode)					
Typical operating wavelength	1.03, 1.06 µm	1.55 µm	1.95 µm			
Customizable wavelength	-	-	1.9 ~ 2.1 μm			
Pulse energy	Up to 1 mJ					
Pulse width	100-300 ns (non-adjustable, factory selectable)					
Pulse repetition rate	10-200 kHz (non-adjustable, factory selectable)					
Max. average power	10 W (higher or lower power available)					
Beam quality, M <sup>2</sup>	< 1.3					
Output polarization	Random (option: linear polarization)					
Output delivery	Free-space collimated beam $\sim 1$ mm diameter (beam expansion available)					

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

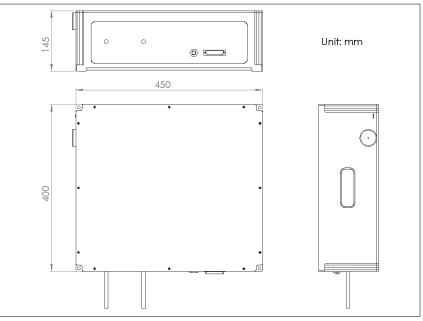
Specifications subject to change without notice



# **General Characteristics:**

Parameter	Specification			
Operating temperature	10 to +30 °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	-	хххх	-	ХХХ	•	ххх	-	хх
		Standard Wavelength: 1950 = 1.95 μm 1550 = 1.55 μm 1060 = 1.06 μm 1030 = 1.03 μm		Pulse Energy: m500 = 0.5 mJ 01 = 1 mJ		Pulse Width: 100 = 100 ns 300 = 300 ns		Pulse Rep Rate: 010 = 10 kHz 050 = 50 kHz 100 = 100 kHz		Polarization: RP = random polarization LP = linear polarization



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