

## 2 Micron Pulsed Fiber Laser Module

### AP-QS1-MOD

#### Features:

- Laser emission in the 2  $\mu\text{m}$  wavelength region
- Up to 10 kW peak power
- Up to 10 W average power
- Nanosecond pulses
- Output modulation capability
- Near diffraction limited beam quality
- Turn-key control box available
- Custom options available



#### Applications:

- Welding/marketing/cutting/micro-machining clear plastics
- Other plastic, organic, and metal materials processing
- Laser surgery and laser aesthetics
- LIDAR

#### Optical Characteristics:

Parameter	Specification	
	180 ns Option	30 ns Option
Operation mode	Pulsed	Pulsed
Operating wavelength	1.95 $\pm$ 0.05 $\mu\text{m}$	1.95 $\pm$ 0.05* $\mu\text{m}$
Max. average power	10 W	10 W
Pulse repetition rate	20 kHz	30 kHz
Pulse width	180 $\pm$ 20 ns	30 $\pm$ 5 ns
Max. pulse energy	500 $\mu\text{J}$	333 $\mu\text{J}$
Beam quality, $M^2$	< 1.3	
Output power stability	Within $\pm$ 5%	
Output polarization	Random (Option: Linearly Polarized)	
Output modulation	Optional, 1 kHz max. frequency	
Output delivery	Optical fiber armored cable with collimator termination, collimated output beam 6.5 mm diameter (nominal).	
Output fiber length	Standard length 2 meters	

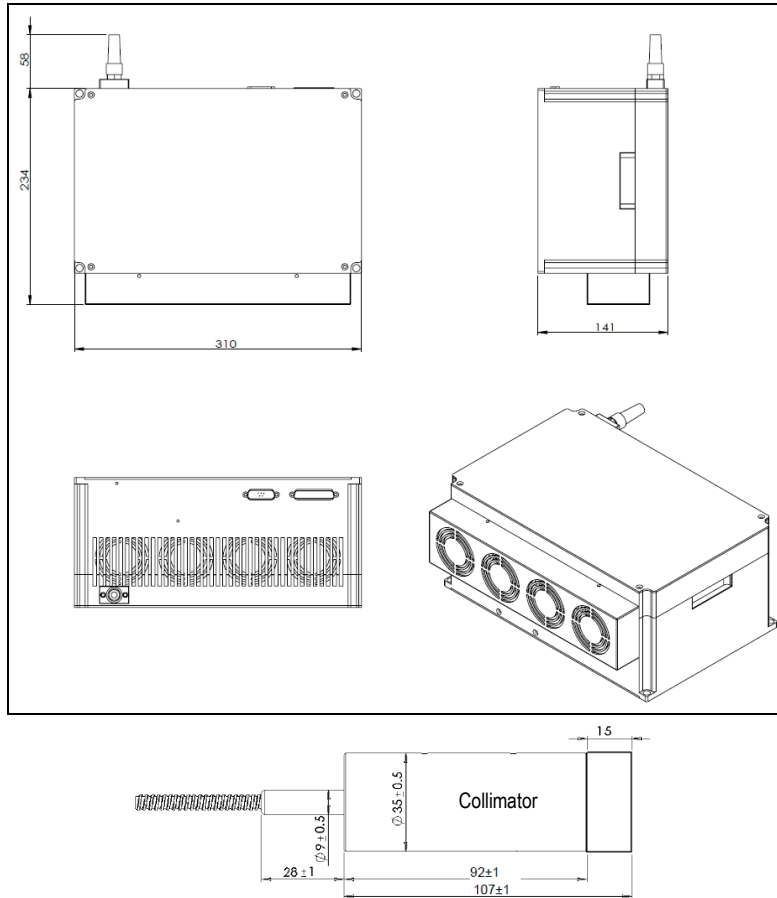
\* Wavelength customization available from 1.92  $\mu\text{m}$  to 2.0  $\mu\text{m}$ .

Specifications subject to change without notice

## General Characteristics:

Parameter	Specification
Operating temperature	10 to 35 °C
Storage temperature	-10 to +70 °C
Cooling	Forced air
Power supply requirement	24V/13.5A, 15V/3A
Warm-up time	10 minutes
Package dimensions	310(W) x 234(D) x 141(H) mm

## Mechanical Outline:



## Ordering Information:

Part Number:	AP-QS1-	MOD	-	xxxx	-	xx	-	(Pulse Option)	-	(Polarization)
	Standard Wavelength:	Output Power:		Pulse Width:		Polarization:				
	1950 = 1950 nm	02 = 2W		180 = 180 ns version		(no spec) = random polarization				
	Custom Wavelength:	10 = 10W		30 = 30 ns version		LP = linearly polarized				
	xxxx = xxxx nm	xx = xxW								

(For special request, please contact AdValue Photonics at 1-520-790-5468 or [sales@advaluephotonics.com](mailto:sales@advaluephotonics.com).)

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**The 2 μm Fiber Laser Experts**