



Erbium-doped Fiber Amplifier(1525nm-1625nm)

Based on Erbium-doped fiber amplifier technique, Precilasers can provide amplifier that cover 1525-1625nm range, to maxium power of 40W, and keeping very low phase noise and intensity noise.

Feature

- High Power
- Low Phase Noise
- Low Intensity Noise

Application

- Quantum Precision Measurement
- Quantum Computation
- Pumping



Specification

Partnumber	FA-SF-X-Y-CW ⁽¹⁾				
Wavelength range	1525-1530nm	1530-1535nm	1535-1570nm	1570-1596nm	1596-1625nm
Output Power	> 1w	>2W/10W/15W	>2W/10W/20W/40W	>2W/10W	>2W/5W
Typical Wavelength	1550.12nm, 1560.48nm				
Bandwidth	> ±3nm	> ±5nm	> ±10nm	> ±10nm	> ±5nm
Relative Intensity Noise	<0.05% (RMS, 10Hz-10MHz Integration), Output Power<20W@1550-1560nm <0.5% (RMS, 10Hz-10MHz Integration), Output Power 20-30W@1550-1560nm <1% (RMS, 10Hz-10MHz Integration) Output Power>30W@1550-1560nm				
Power Stability	<0.75% @3hours, RMS				
Power Tuning Range	1-100%				
Output Mode ⁽²⁾	Single Mode PM fiber, FC/APC Connector (Output Power≤2W) OR Collimated Output (All Power)				
Beam Diameter	0.6±0.2mm				
Beam Quality	TEM ₀₀ , M ² <1.1				
Polarization	Linear, >23dB				
Seed Laser Input Power	≥10mW ⁽³⁾				
Seed Laser Input Isolation	>25dB				
Output Laser Isolation	>25dB				
Cooling	Air Cooling /Water Cooling				

Operating Environment & Power Supply

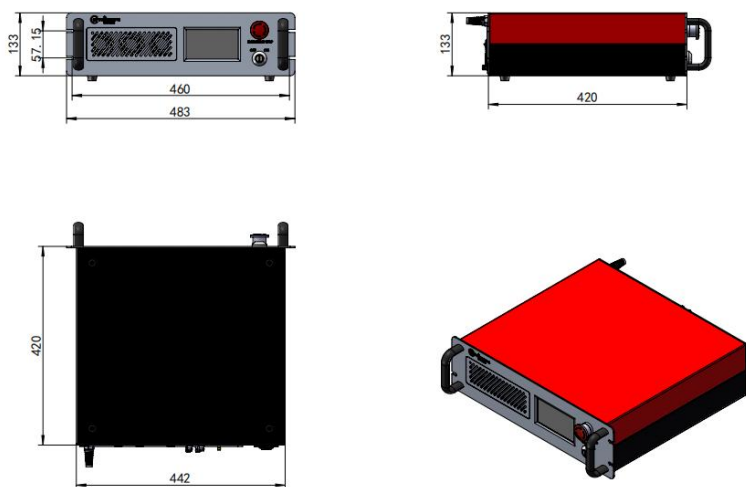
Temperature	15-30 °C (Air Cooling) OR 15-35 °C (Water Cooling)
Power Supply	100V-240V, AC, 50/60Hz
Communication	RS422

(1)X is the center wavelength, Y is the output power, for 1550nm 10W amplifier, the partnumber is FA-SF-1550-15-CW.

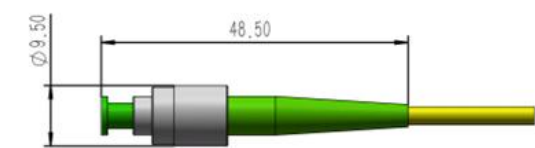
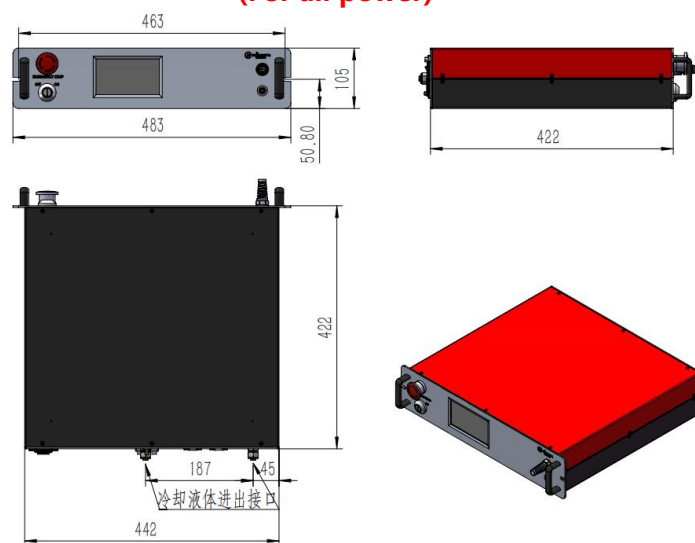
(2) Beam size for collimated outout, If PM fiber FC/APC connector output, there is no extra collimator

(3) Default input power should be 10-50mW, for higher or lower input power, please email us for customization

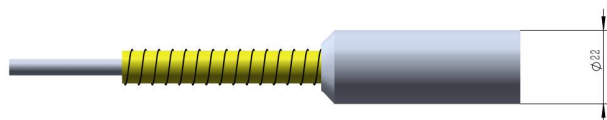
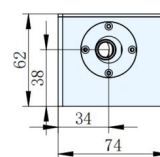
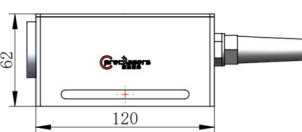
**Air cooling controller size
(Output power $\leq$ 50W)**



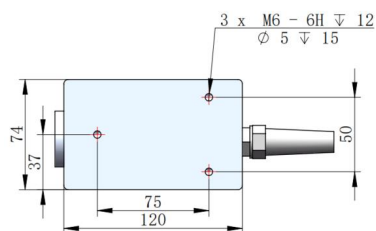
**Water cooling size
(For all power)**



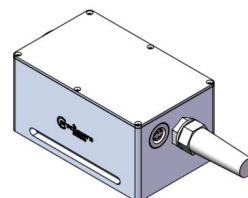
FC/APC connector (Output power $\leq$ 2W)



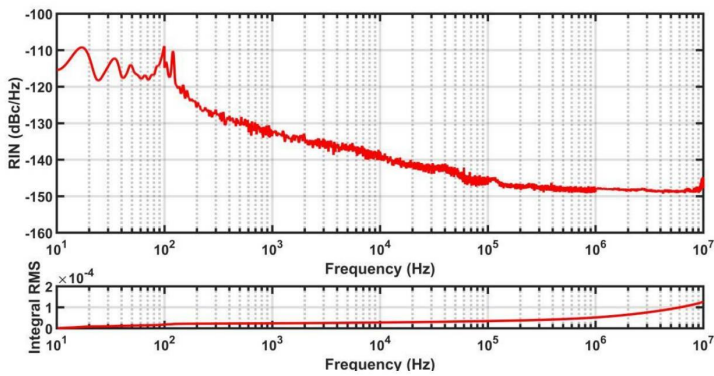
Collimator size (Output power $\leq$ 20W)



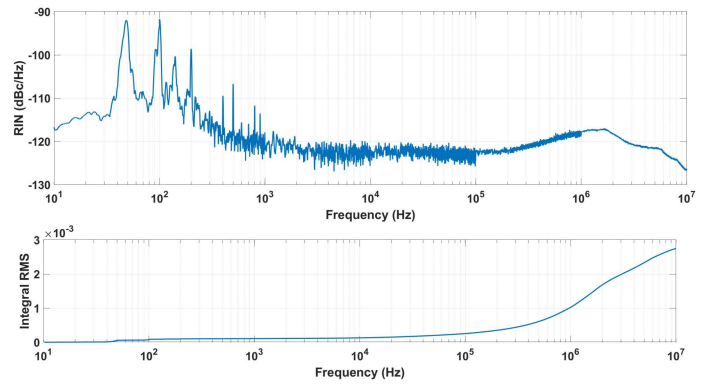
Laser head size



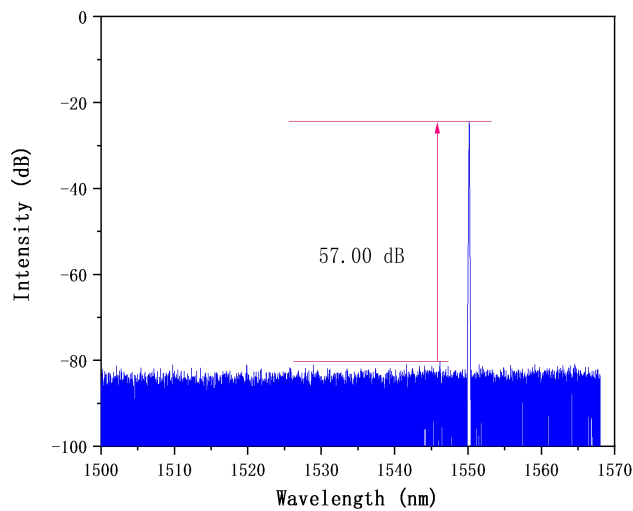
❖ Performance (Typical Value)



RIN (1560nm, Power 20W)



RIN (1560nm, Power 35W)



1550nm Optical Spectrum



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⚠ Laser Hazard

Visible or invisible laser radiation, avoid eye or skin exposure to direct, reflected or filtered radiation.

CLASS 4 Laser Products