

1560nm High-Power Femtosecond Fiber Laser

The E-Fiber series of high-power ultrafast lasers integrates the latest femtosecond laser technology, using high-performance rare-earth fibers as the working medium and combining high-precision dispersion compensation technology and active servo control systems to achieve stable output of 1.5 μ m band femtosecond pulse lasers with an average power of 1 watt. It starts up automatically with one click upon power-on and operates stably for a long time. It features extremely narrow laser pulses and high peak pulse power, and is widely applied in optical frequency combs, supercontinuum generation, terahertz (THz) and other fields. Customization is available for parameters such as pulse width, power, and repetition frequency.

Features

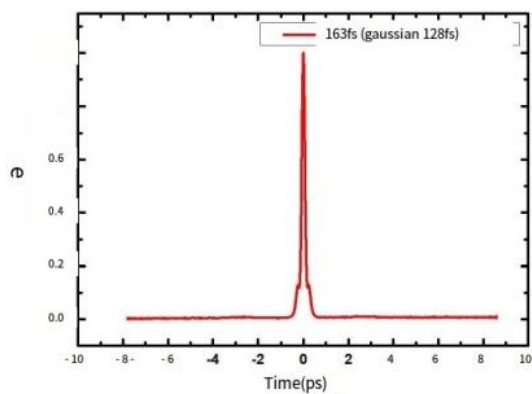
Pulse width: 120 fs
Average laser power: 1W
Self-starting and maintenance-free High stability

Application

Optical frequency comb Supercontinuum
Terahertz waves
Ultrafast laser phenomena

Optical indicators	unit	Typical value	Note
Central wavelength	nm	1560 \pm 10	
Pulse width	fs	\leq 120	Customizable
average laser power	W	1	Customizable
Power instability	-	\pm 1%	24h@25 $^{\circ}$ C
Repetition frequency	MHz	80 to 10	Customizable
Single-pulse energy	nJ	$>$ 10	
Laser polarization state	-	Linear polarization, PER $>$ 20 dB	Vertical polarization
Laser output mode	-	Spatial light	
Beam quality	-	M2 $<$ 1.2	TEM00
Beam diameter	mm	\leq 1.6	*1/e 2 Waist Diameter
Beam divergence angle	mrاد	$<$ 1.5	

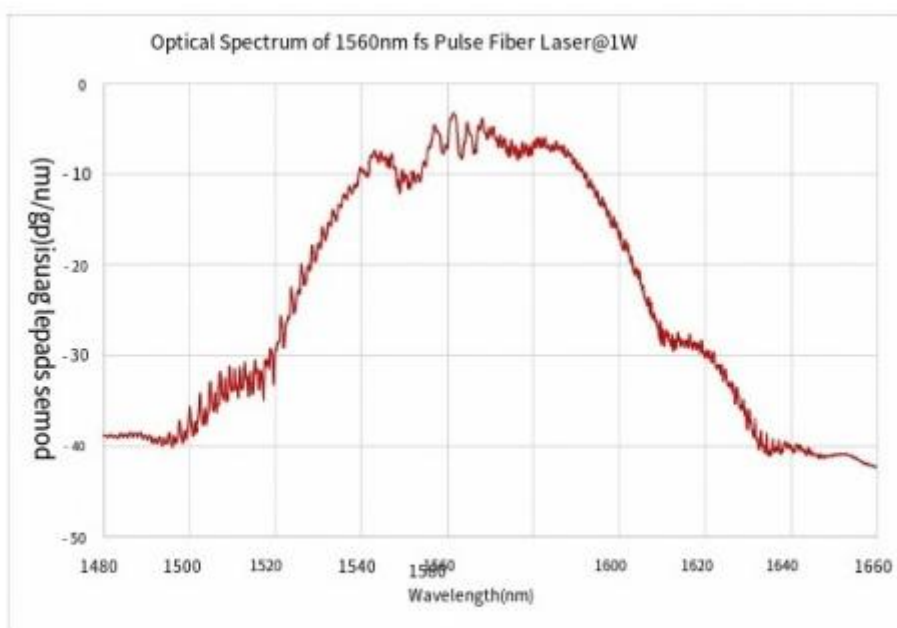
Electrical and environmental parameters	unit	Typical value	Note
Synchronous telecommunication signal inter-face		SMA	
Preheating time	min	$<$ 1	
Working temperature	$^{\circ}$ C	5 \sim 45	
Power supply	-	AC 110~240VAC	Power consumption $<$ 40W
Size	mm	330(W) \times 398(D) \times 112(H)	desktop
weight	kg	\leq 5	



Pulse AC curve



Pulse sequence



spectrum

Ordering Information/Model

FSPL	Wavelength(nm)	Pulse width(fs)	Power(mW)	Repetition frequency(MHz)	Output format	Encapsulation form
	1560	120	1000	80/100	FS=spatial light	B=desktop