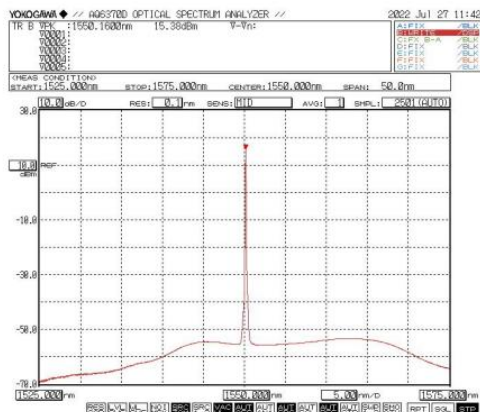# 1550nm Wavelength SM Fiber Coupled Laser（1~20W Power, Bench-top)）

This laser employs a DFB seed laser in conjunction with a high-power gain optical path module to achieve single-mode fiber output of high-power single-wavelength laser.The professionally designed drive and temperature control circuits ensure the safe and stable operation of the laser,and the spectrum and power remain stable over the long term.The desktop design is convenient to operate,and the control interface is simple and intuitive,making it suitable for laboratory use by scientific research users.

Features
A variety ofpower options from 1W to 20W Single-mode optical fiber output
Power and spectral stability

Application
Optical fiber sensing
Optical fiber communication
Optical experiments

Optical indicators	unit	Typical value		Note
Working wavelength	nm	1550		Customizable from 1535nm to 1565nm
Wavelength accuracy	nm	±0.5		
Spectral line width	nm	≤0.1		
Side-mode suppression ratio	dB	>50		
Working mode	-	CW		Continuous light
Output power	dBm	30/33/37/40/41/43		
Power regulation range	-	10%to 100%		
Short-term stability(15 minutes)	dB	±0.02 or less		Equivalent≤±0.5%
Long-term stability(8 hours)	dB	±0.05 or less		Equivalent≤±1.2%
polarization state	-	random	Linear polarization	
Fiber pigtail type	-	SMF-28	PM1550	
Fiber pigtail connector type		FC/APC	FC/APC(Slow Axis Alignment)	The connector is only used for power testing

Electrical and environmental parameters	Desktop	Module(Power:30/33 dBm)	Module(Power:37/40 dBm)
Control mode	Key input/RS232 serial communication	RS232 serial communication	RS232 serial communication
Communication interface	DB9 Female	DB9 Female	DB9 Female
for Electricity	100~240V AC,<150W	DC12V3A,≤36W	DC12V6A,≤80W
Dimensions(mm)	376(W)×340(D)×112(H)	125(W)x 150(D)x 31.5(H)	139(W)x235(D)x70(H)
Operating temperature range	-5~+35 C		
Working humidity range	0 to 70%		

Ordering Information/Model				
FLH	Working wavelength(nm)	Output power(mW)	Output pigtail type	Encapsulation form
	1550	30/33/37/40/41/43	SM=SMF-28;PM=PM1550	M=module B=desktop