

TFL-1560-2-PM-B



1600-1750nm Raman fiber amplifier

Core Parameters

Operation Wavelength 1560nm: Output power ≥2W; Polarization Extinction Ratio 20.7dB; linewidth 63.922 kHz

Overview

This product is a high-performance 1560 nm wavelength laser with an output power of up to 2 W, integrating a DFB seed laser source and EDFA amplification technology. The seed source operates with a typical current of 100 mA, featuring low power consumption and excellent wavelength stability at 1560.05 nm. With a polarization extinction ratio (PER) of up to 20.7 dB, the laser provides excellent polarization performance, while also offering a 2 nm tuning range. The measured laser linewidth is only 63.922 kHz, demonstrating ultra-narrow spectral characteristics. This laser is ideally suited for applications such as fiber sensing, coherent communication, and high-precision optical spectroscopy measurements.

Technical Specifications

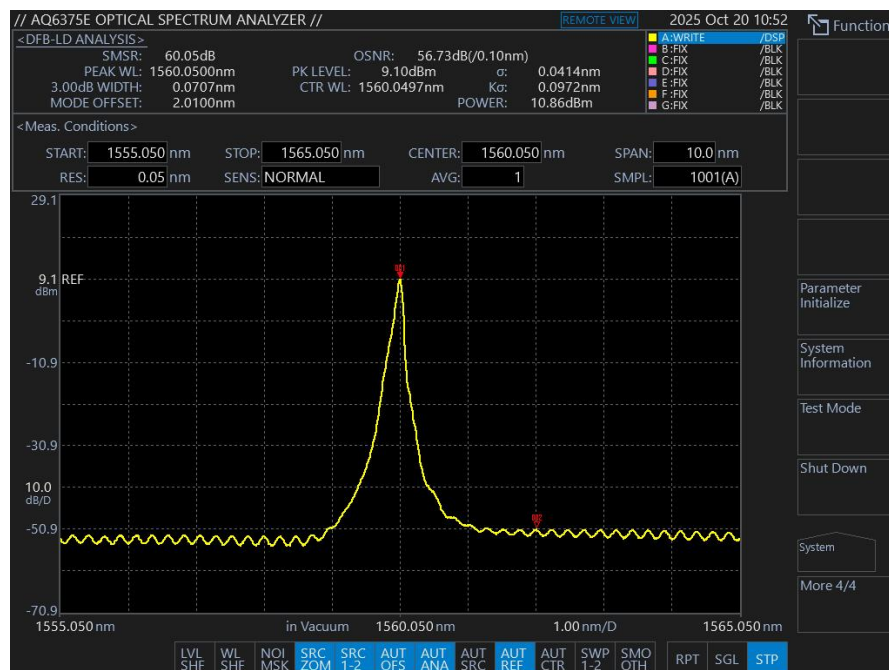
Parameter	Symbol	Unit	Testing result	Requirement
Output Power	P _{out}	W	2	>2
DFB Operating Temperature	T _{DL}	°C	25.0	10-40
EDFA Input Power	P _{in}	dBm	7.800	-10-10
DFB Operating Current	I _c	mA	100	<120
Tuning Range	λ _r	nm	2	2

Wavelength	λ_c	nm	1560.05	1560±1
Polarization Extinction Ratio	PER	dB	20.7	≥16

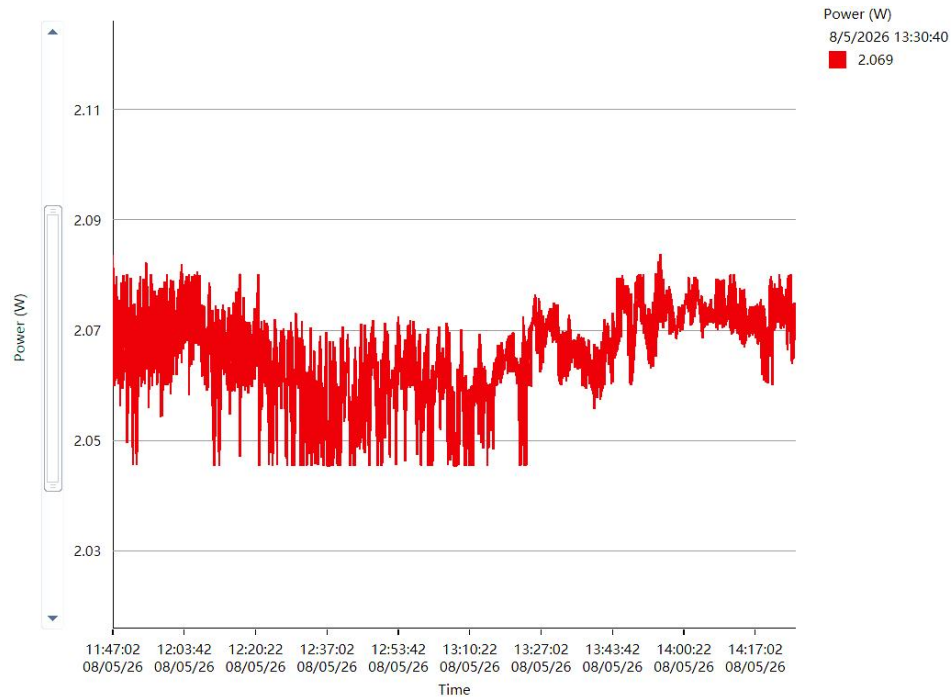
Pump Linewidth Measurement(63.922 kHz)



Optical Spectrum data



Power Stability



PC Software Interface

LDPD EDFA Controller v1.0a

Port: COM56 Disconnect Instrument Model: LDRVMLN380 VER260601

LDRVMLN380 VER260601

PCB Temperature 34.88 °C LD Temperature 24.999 °C LD Current 0.42 mA LD OFF

LDRV DUAL310 VER260601

PCB Temperature -100.00 °C LD Temperature -100.000 °C LD Current 0.00 mA LD OFF

TEC12 VER260701

Shield Temperature 21.86 °C TEC OFF

Temperature Set: 30.0 °C Set SAVE

EDFA2000 VER260701

APC Mode 1 Run Mode 0 Warning 1 0000000000010001 Warning 2 0100010001000000

EDFA Temperature 37.9 °C Pump1 Temperature 24.9 °C Pump2 Temperature 31.0 °C EDFA OFF

Input Power -60.0 dBm Output Power -60.0 dBm Back Power 0 uA

Pump1 Current 0.0 mA Pump2 Current 0.0 mA TEC Current 217.0 mA

APC Mode: ☒ APC Mode Set

Pump1 Current: 0 Set

Pump2 Current: 0 Set

Power Set: 33.0 dBm Set SAVE

Communication Log

☒ Hide state query

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>> :mode 2
<< (!)Mode 2[OK]
>> %mode 1
<< (!)Mode 1[OK]
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