

TDFA

Thulium-Doped Fiber Amplifier

TDFA is a benchtop Thulium-doped fiber amplifier. It incorporates high-end multi-mode pump diodes, WDM combiners, and high-gain Tm-doped fiber. The system has industrial-leading power-level and noise performance.

Our TDFAs feature a turn-key design. The operator panel has an alarm and status indicators, and integrates RS232 connector (or Ethernet interface) for PC remote control. There are customization options for single-frequency, all-polarization-maintaining and short-pulsed operation.

Applications :

- Mid-IR frequency conversion
- Mid-IR spectroscopy analysis
- Silicon Photonics
- Mid-IR general experiment equipment

Main Specification

Laser Parameters

Operating Wavelength	1800-2000 nm	Beam Quality	TEM00 □ M2<1.2
Gain coefficient	>20 dB	Output polarization	Random / linear polarization
Saturation power	>100 mW	Output Type	SMF28e/PM1950 Fiber,
Average Power Stability	<0.5 RMS (24h@25°C)		FC/APC Connector

Electrical, Environmental and Mechanical Parameters

Supply Voltage	100-240 VAC	Weight	4.6 kg
Operational Temperature Range	15-35 °C	Dimensions	306×276×111.6 mm
Operational Humidity Range	20-80%	Cooling	Air cooling

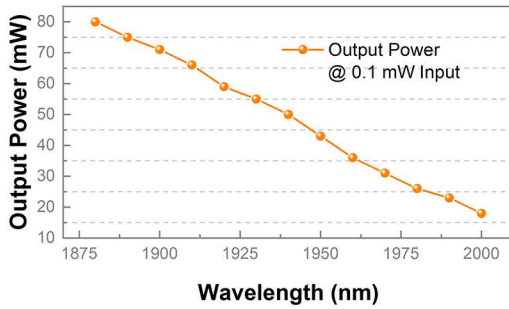


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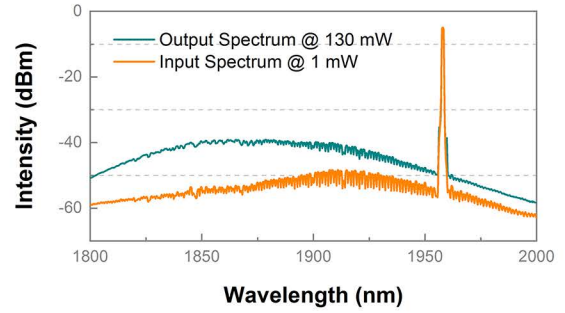
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Test Data

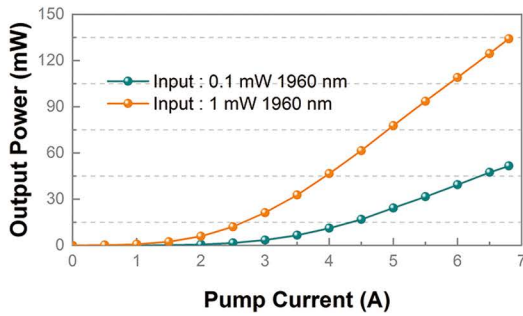
Different wavelength amplification



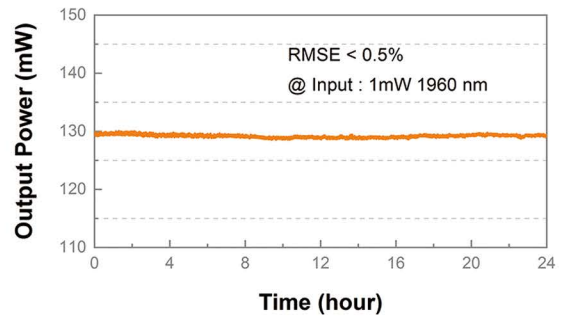
Comparison of input and output Spectrum



Current power curve



Average power stability



Machine Drawing

