



TLPN-1-1-20-M Pulsed Thulium Nanosecond Fiber Laser

NEW PRODUCT





Applications

- Plastics
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- Materials Processing
- Medical Therapy, Surgery
- Spectroscopy
- Crystal Pumping
- ▶ Pulse Energy 1 mJ
 - ▶ Repetition Rate 20-50 kHz

• Output Power up to 20 W

• Wavelength 1.9-2 μm

Features

- ▶ Pulse Width 1-100 ns
- ▶ Beam Quality M² < 1.1
- Optional Guide Laser
- ▶ Telecom Reliability
- Compact & Low Cost
- Industrial Performance

IPG Photonics' New TLPN thulium fiber laser provides nanosecond pulses with central wavelength in the 1900-2000 nm range and output powers up to 20 W. Based on IPG's pioneering efficient and reliable fiber laser technology, the TLPN features a super-compact lightweight optical head connected with a fiber cable to a small air-cooled control module. The all fiber construction allows for full range of output power without changes in power stability and beam mode parameters. IPG's TLPN 2 μm pulsed laser addresses a variety of materials processing, scientific and medical applications.



TLPN-1-1-20-M Pulsed Thulium Nanosecond Fiber Laser

Optical Characteristics

Central Wavelength Range ¹ , nm	1900-2000
Average Power, W	20
Power Tunability, %	10-100
Pulse Energy, mJ	1
Pulse Duration, ns	1
Peak Power, MW	up to 1
Repetition Rate, kHz	20-50
Beam Quality, M ²	TEM ₀₀ , 1.1

¹Custom central wavelengths available upon request

General Characteristics

Module Dimensions, mm	448 x 418 x 133
Optical Head Dimensions, mm	242 x 82 x 60
Cooling	Air-cooled
Supply Voltage, VDC	24
Power Consumption, W	300



MAX. CONTINUOUS OUTPUT POWER: 25 W MAX: ED BUTPUT POWER: 10 W PULSE BERTPITTON RATE: 20-50 Hz WWEENGTH RANGE: 10-20 JUN WWEENGTH RANGE: 10-20 JUN AND DET CO SAN EXPOSURE TO DEFE CO SAN EXPOSURE TO DEFE CO SAN EXPOSURE TO DEFE CO SAN EXPOSURE POWER SAN EXPOSURE PER CO SAN EXPOSIT

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