

RAY-2000-Ns, 2 μ m Ns Pulsed Fiber Amplifier

Key Features

- Customized wavelength: 1900-2130nm
- Nanosecond pulses
- High peak power & energy
- Excellent power stability
- Near Diffraction limited beam quality
- Standard or PM fiber
- Front touch panel control & USB
- 19" 2U turn-key benchtop



RAY-2000-Ns
Turn-key benchtop - 19" 2U

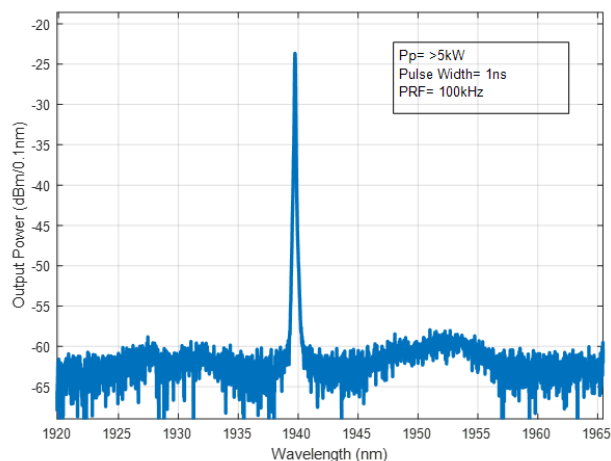
Description

Cybel's **RAY- 2000-Ns** is a versatile nanosecond pulse amplifier for scientific or industrial amplification with flexible output parameters. The operating wavelength can be customized from 1900nm to 2130nm while the pulse repetition rate (PRF) is adjustable from 100kHz to 1MHz and the ns pulse-width can be tailored to specific customer's application. The output power can be scaled to Watt level, leading to pulse energy larger than a μ J.

Cybel's **RAY-2000-Ns** is available with standard or PM fiber in a turn-key 19" 2U Benchtop, suitable for Lidar applications or a pump source for Mid-IR generation. Cybel's **TRAY-2000-Ns** is the perfect ns pulse generator companion to **RAY-2000-Ns**.

Applications

- LIDAR
- Mid-IR Generation
- Pump source
- Frequency Conversion
- Spectroscopy



Optical Spectrum at 1940 nm, PPeak > 5kW

RAY-2000-Ns, Fiber Amplifier Specifications

OPTICAL	Unit	Min	Max	Comments
Operating Wavelength Power	Nm	1900	2130	Single Mode Operation Wavelength
Average Input Signal Power	dBm	-30	-10	
Average Output Signal Power	dBm	30		Depending on pulsing conditions
Peak output power	kW	1	10	Depending on pulsing conditions
Pulse width	ns	1	100	Fixed select pulse range
Pulse repetition rate	kHz	100	1000	Fixed selected range
Output Beam Quality (M ²)	M ²	1.1		
Pulse energy	uJ	10		Dependent on pulsing conditions
Power Stability (RMS)	%	<1%		For 24H @25C
Output Fiber Length	m	> 0.7		Longer Fiber at Request with FC/APC
Input Fiber Length	m	> 0.7		Longer Fiber at Request
Output Isolation	dB	No		Options:1) endcap fiber with AR coating 2) custom collimator
ELECTRICAL				
Voltage	V	110-220		@ 60-50 Hz
Warm up Time	min	20		
Power Consumption	W	<50		25 °C,
Control Interface		USB		
Mode of Operation		ACC		
GENERAL				
Dimensions	inch	19"		2U -Benchtop, Rackmount optional
Operating Case Temp.	°C	15 to 30		

CUSTOMIZATION

The RAY-2000-Ns is an amplifier platform that can be customized to match Customers' specific requirements. Please contact Cybel.

COMPLIANCE with Regulatory Requirements: These benchtop products are Class 4 lasers as designated by the Center for Device and Radiology Health (CDRH). As such they are intended only in integration into other equipment and do not comply with CDRH requirement. It is the customer responsibility for CDRH certification of the full system that incorporates this industrial laser.

