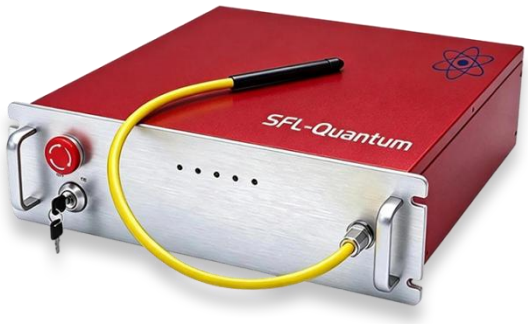
NSLD-1064



High-Power Pulsed 1064nm Fiber Laser

Core Parameters

Central wavelength 1064±1nm, Pulse Width 7.5 ns, Repetition Frequency Adjustment Range 10 MHz, Output Average Power ≥300W, M^2<1.2

Overview

The High-Power Pulsed 1064nm Fiber Laser is designed for demanding industrial and scientific applications requiring high peak power, exceptional beam quality, and versatile parameter tuning. Operating at a central wavelength of 1064 nm, this system delivers an average output power exceeding 300W with adjustable pulse width and repetition rate, making it an ideal choice for precision processing, materials research, and advanced optical systems.

Features

High Average Power: Over 300W stable output power.
Excellent Beam Quality: Near-diffraction-limited beam profile with M2 < 1.2 (Mx2 = 1.11, My2 = 1.12).
Flexible Parameter Controls: Fully adjustable pulse width (7.5 ns nominal) and pulse repetition frequency (10 MHz nominal).
User-Friendly Control Interface: Fully integrated with proprietary host computer software for remote diagnostics and operation.

Technical Specifications

Technical parameter	Qualification
Output wavelength	1064±1nm
Output Average Power	≥300W
Pulse repetition frequency	10 MHz, adjustable

Pulse length	7.5 ns, adjustable
Beam Quality Factor	M^2<1.2
Pulse energy	30uJ
Impulse peak power	4kW
Ambient temperature	0–40 degrees
Control model	Control via upper-level software

Test Data

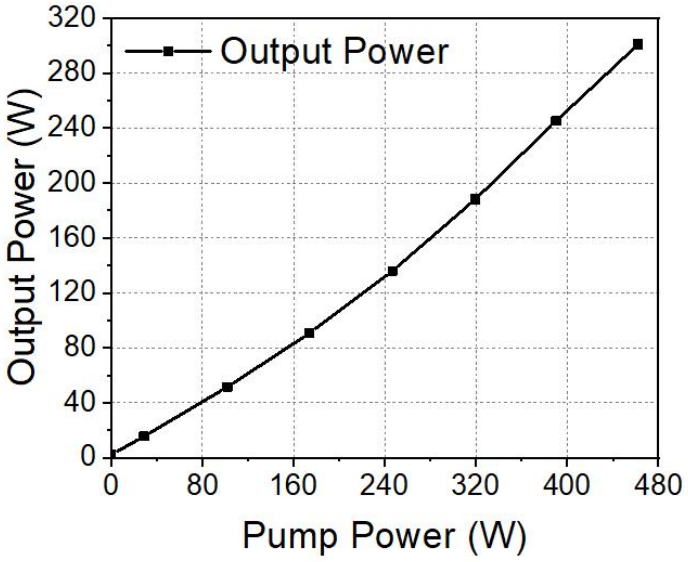


Figure 1. Output Power

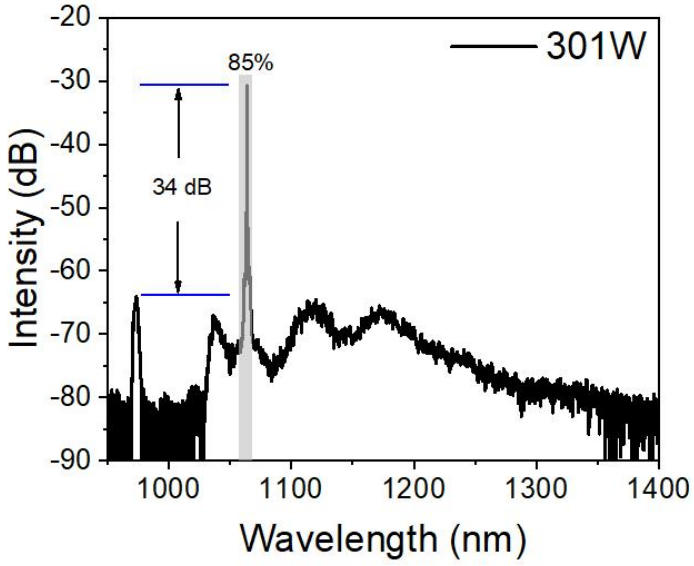


Figure 2. Output Spectrum

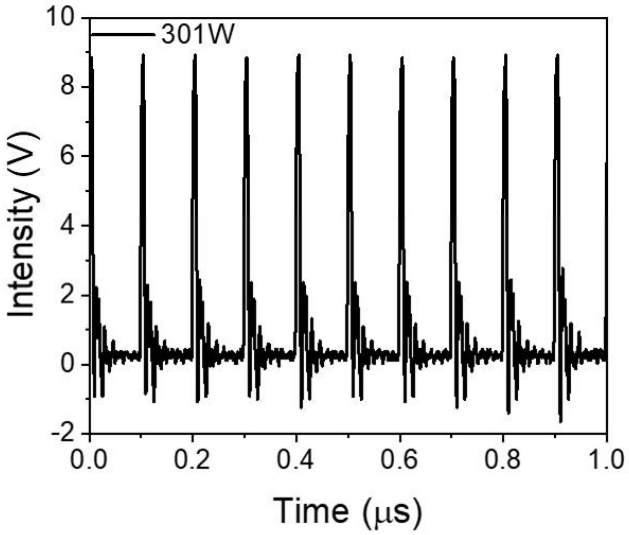


Figure 3. Pulse Repetition Frequency

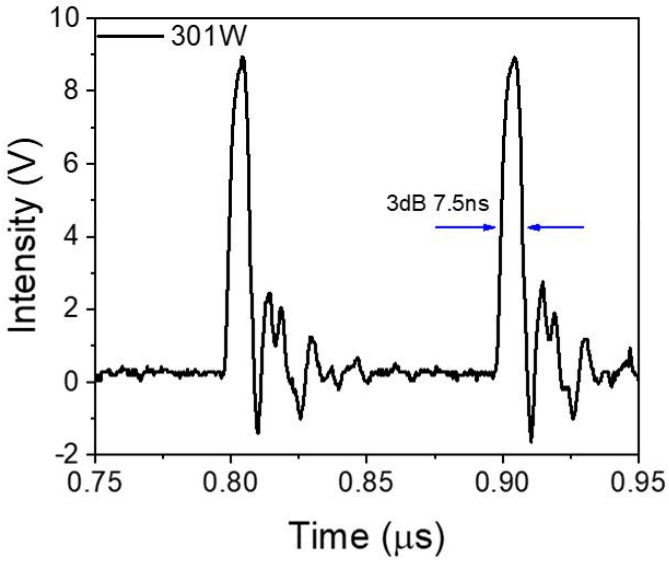


Figure 4. Pulse Width

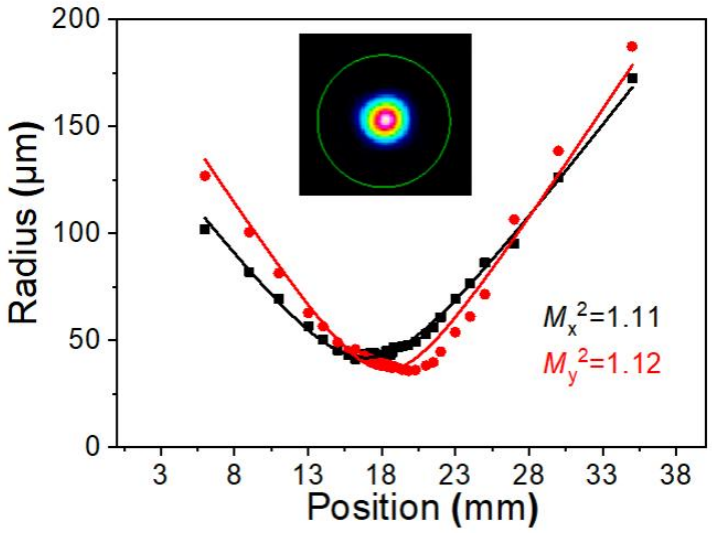


Figure 5. Beam Quality Test

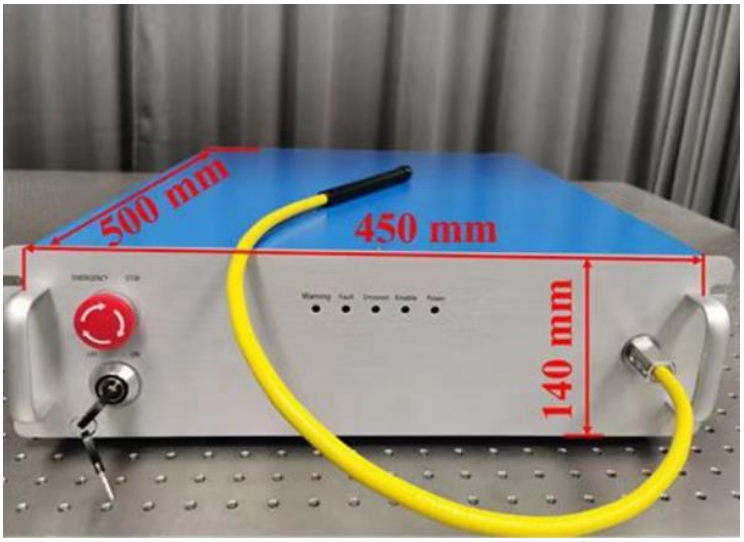


Figure 6. Physical Representation