

RFL-P50QB

Raycus 50W Q-Switched Pulse Fiber Laser

Data Sheet V1.0

Raycus has launched its 50W Q-switched pulsed fiber laser series, an industrial-grade solution designed for marking and micro machining applications. This series of pulsed lasers is characterized by high peak power, high single-pulse energy, and optional spot diameter, making it a versatile tool for various industrial needs.



In the field of marking applications, these lasers offer a cost-effective alternative to traditional lasers, with the added advantage of more stable performance. Beyond marking, they are also well-suited for precision machining and graphic engraving, providing high-quality results across a range of tasks.

Product Features

- Highly Stable Laser Output
- High Single-pulse Energy
- High Marking Efficiency
- Short Pulse Setup Time
- High Reliability
- Maintenance-free Operation

Product Applications

- ◆ Material Processing
- ◆ Marking
- ◆ Deep Carving
- ◆ Cleaning
- ◆ Precision Welding
- ◆ Micro-Processing
- ◆ Metal Film Cutting & Piercing
- ◆ Metal Drawing
- ◆ Texturing
- ◆ Silicon Processing
- ◆ Resistance Adjustment
- ◆ ITO Film Etching

Technical Specifications

Central wavelength	1060~1085 nm	Output power tunability	10-100 %
Average output power	50 W	Output fiber cable length	3.0 M
Polarization	Random	Working voltage	24±1 VDC
Optical isolator	Yes	Power consumption	340 W @20°C
Single pulse energy	1 mj @50kHz	Cooling	Forced Air Cooled
Beam quality	<1.6 m ²	Dimension W×D×H	260×116×340 mm
Beam diameter (mm)	7±1 mm	Operating temperature	0~40 °C
Pulse duration	120-150 ns @50kHz	Store temperature	-20~60 °C
Pulse repetition rate	50 - 100 kHz	Operating humidity	≤80%

Product Dimensions

