

YLPN-1-4x200-50-M

Adjustable Pulse Duration Fiber Laser

NEW PRODUCT



Applications

- ▶ Precision Marking
- ▶ Trimming
- ▶ Coating removal
- ▶ Scribing
- ▶ Surface Treatment
- ▶ Texturing
- ▶ Cutting



Features

- ▶ Pulse Energy up to 1 mJ
- ▶ Average Power up to 50 W
- ▶ Pulse Repetition Rates 2-1000 kHz
- ▶ Over 20% Wall-plug Efficiency
- ▶ Instant Modulation Response
- ▶ Excellent Pointing Stability
- ▶ Maintenance-free Operation
- ▶ Full Flexibility in Operating Parameters

IPG Photonics' YLPN-1000-4x200-50-M nanosecond ytterbium fiber laser provides peak power of 15 kW with scalable average output power up to 50 W, adjustable pulse waveforms in the range of 4-200 ns. The laser is triggered externally in a wide range of pulse repetition rates 2-1000 kHz, offers pulse energy of up to 1 mJ and the ability to scale average power independent of the energy. An output isolator ensures high output power stability and allows to process highly reflective materials.

IPG's YLPN laser is a small air-cooled maintenance-free module designed for OEM applications. The robust all fiber design packaged into a rugged case allows operation in harsh industrial environments. The all fiber format allows for the adjustment of peak power and/or pulse repetition rate without affecting any of the output beam parameters. This fiber laser is much more efficient and compact than conventional lasers on the market. Fine processing of thin foils and coating as well as treatment of surfaces is easy to adjust using wide range of operating parameters. It is ideal for applications in micromachining, scribing, texturing, ablation, the solar/ photovoltaic arena, hole drilling, resistor trimming and marking.

YLPN-1-4x200-50-M

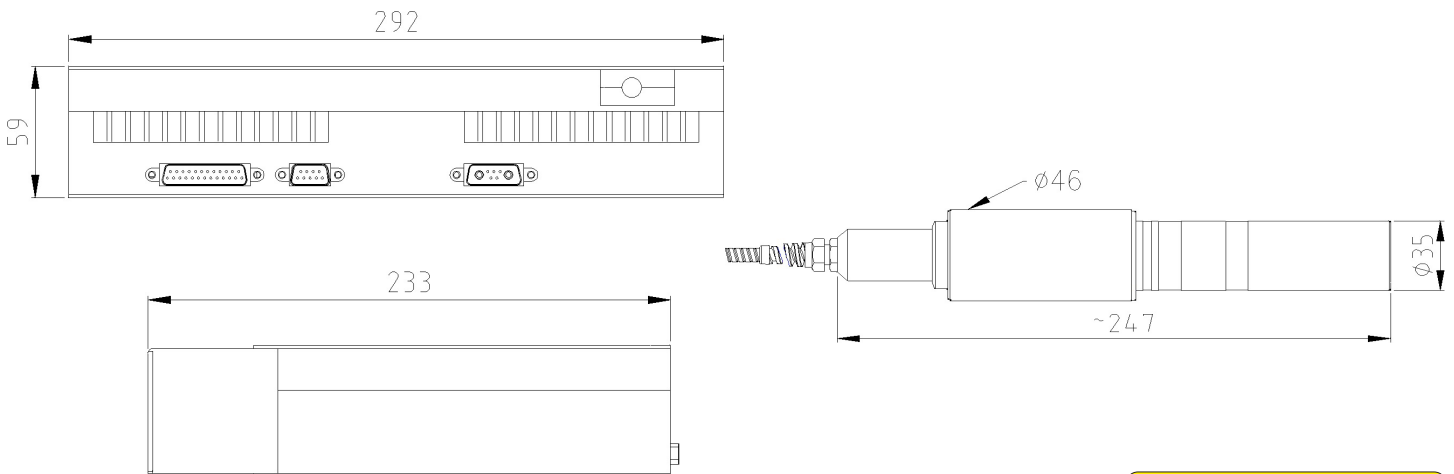
Adjustable Pulse Duration Fiber Laser

Optical Characteristics

| | |
|------------------------------|----------|
| Wavelength, nm | 1064 |
| Average Power, W | 50 |
| Pulse Energy, mJ | 1 |
| Pulse Duration, ns | 4-200 |
| Peak Power, kW | up to 15 |
| Repetition Rate, kHz | 1.6-1000 |
| Beam Quality, M ² | <1.5 |

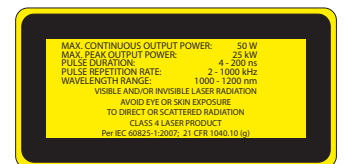
General Characteristics

| | |
|--|----------------|
| Module Dimensions, mm | 292 x 233 x 59 |
| Optical Head Dimensions (L x diam), mm | 247 x 46 |
| Cooling | Air-cooled |
| Supply Voltage, VDC | 24 |
| Power Consumption, W | typ. 120 |



+1 (508) 373-1100; sales.us@ipgphotonics.com
 +49 2736 44200; sales.europe@ipgphotonics.com (all European Inquiries)

www.ipgphotonics.com



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