



ULPN-355-50-1-30-R

Ultraviolet Nanosecond Fiber Laser

NEW PRODUCT



Applications

- ▶ Materials Processing
- ▶ Micromachining
- ▶ Solar/Photovoltaic
- ▶ Plastics Marking
- ▶ Texturing
- ▶ Si Ablation
- ▶ Scribing



Features

- ▶ Wavelength 355 nm
- ▶ Pulse Energy >50 μ J
- ▶ Pulse Duration 1.5 ns
- ▶ Peak Power >40 kW
- ▶ Beam Quality $M^2 < 1.8$
- ▶ Repetition Rate up to 600 kHz
- ▶ Record Wall-plug Efficiency
- ▶ Air-cooled
- ▶ Rugged Design

IPG Photonics' NEW ULPN-R Series ultraviolet nanosecond fiber lasers provide high peak power with scalable average output power up to 30 W, 1.5 ns pulse duration at full operational repetition rate range of 10-600 kHz. The all fiber format allows for the adjustment of pulse energy and/or pulse repetition rate without affecting any of the output beam parameters. IPG's novel fiber laser is much more efficient and compact than conventional lasers now on the market, and is ideal for applications in the solar/photovoltaic arena, resistor trimming and marking of transparent materials. The short wavelength, short pulse duration and high peak power result in very small heat affected zone.

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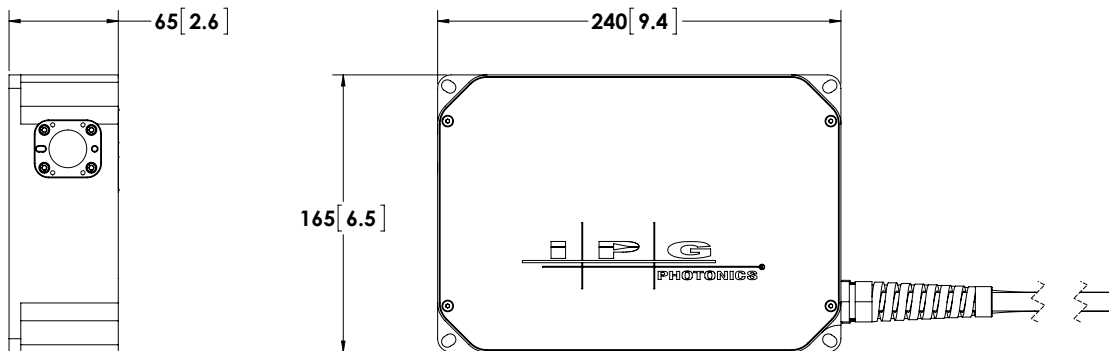
Ultraviolet Nanosecond Fiber Laser

Optical Characteristics

Wavelength, nm	355 ±5
Average Power, W	30
Pulse Energy, μJ	>50
Pulse Duration, ns	1-1.8
Peak Power, kW	>40
Repetition Rate, kHz	10-600
Beam Quality, M ²	<1.8

General Characteristics

Control Unit Dimensions (W × D × H), mm	518 × 449 × 176
Optical Head Dimensions (W × D × H), mm	165 × 240 × 65
Cooling	Air-cooled
Supply Voltage, VAC	100-240, 50-60 Hz
Power Consumption, W	380



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MAX. AVERAGE OUTPUT POWER: 60 W
 MAX. PEAK OUTPUT POWER: 80 kW
 PULSE DURATION: 1-2 ns
 PULSE REPETITION RATE: 10-600 kHz
 WAVELENGTH RANGE: 340-1080 nm

**DANGER - INVISIBLE LASER
 RADIATION AVOID EYE OR SKIN
 EXPOSURE TO DIRECT OR
 SCATTERED RADIATION
 CLASS 4 LASER PRODUCT**

IEC 60825-1:2014

The Power to Transform®