

ULPN-355-MUltraviolet Pulsed Fiber Lasers



FEATURES

- ▶ Wavelength 355 nm
- ▶ Output Power up to 10 W
- ▶ Pulse Energy up to 10 μJ
- ▶ Repetition Rate up to 1 MHz
- ▶ Pulse Duration 1.5 ns
- ▶ Single Pulse or 3-pulse Burst Pulse Mode
- ▶ Peak Power 10 kW
- ▶ Beam Quality M²<1.4
- ▶ Air-cooled module



APPLICATIONS

- ▶ Micromachining
- ▶ Polymer Marking
- ▶ Surface Texturing
- ▶ Si Ablation
- ▶ Scribing
- ▶ Solar/Photovoltaics



ULPN-M Series ultraviolet nanosecond fiber lasers provide high peak power with scalable average output power up to 10 W, 1.5 ns pulse duration at full operational repetition rate range of 10-1000 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 novel fiber lasers are much more efficient and compact than conventional lasers now on the market, and are 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.

ULPN-355-M

Ultraviolet Pulsed Fiber Lasers

Optical Characteristics	ULPN-355-3-M	ULPN-355-5-M	ULPN-355-6-M	ULPN-355-10-M*	
Wavelength, nm	355				
Mode of Operation		Pulsed			
3-pulse Burst Mode	Yes	No	Yes	Yes	
Average Power, W	3	5	6	10	
Max. Pulse Energy, μJ	10; 20 in burst mode	10	6; 20 in burst mode	10; 20 in burst mode	
Pulse Duration, ns		1.5			
Peak Power, kW	up to 10				
Repetition Rate, kHz	10-300	10-500 10-1000			
Beam Quality, M ²	<1.4				

^{*}PRELIMINARY

General Characteristics	ULPN-355-3-M	ULPN-355-5-M	ULPN-355-6-M	ULPN-355-10-M	
Module Dimensions (W × D × H), mm	270 × 256 × 88				
Optical Head Dimensions (W × D × H), mm	98 × 245 × 140				
Cooling		Air-cooled		Air-cooled module Water-cooled head	
Supply Voltage, VDC			24		
Power Consumption, W		<	<70		



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