

# HLPN-2050/2060 Series

## Ho:YLF Hybrid Fiber-to-Bulk Nanosecond Lasers

**NEW PRODUCT**

Acousto-optically  
Q-switched Optical Head



### Applications

- ▶ Plastics Marking
- ▶ Plastics Cutting & Welding
- ▶ Medical Therapy, Surgery
- ▶ Spectroscopy
- ▶ LIDAR
- ▶ OPO Pump Source



### Features

- ▶ Output Power up to 80 W
- ▶ Pulse Energy up to 80 mJ
- ▶ Repetition Rate up to 40 kHz
- ▶ Pulse Duration 10-500 ns
- ▶ TEM<sub>00</sub> Beam Mode

IPG Photonics' HLPN-2050/2060 Holmium:YLF laser provides 10 - 500 nanosecond pulses at ~2.05  $\mu\text{m}$  with pulse energies up to 80 mJ, output powers up to 80 W at repetition rates up to 40 kHz. The Q-switched Ho:YLF head is pumped by IPG's efficient and reliable Thulium fiber laser. The HLPN-2050/2060 2.05  $\mu\text{m}$  pulsed laser addresses a wide range of materials processing, scientific and medical applications.

# HLPN-2050/2060 Series

## Ho:YLF Hybrid Fiber-to-Bulk Nanosecond Lasers

### Optical Characteristics

	HLPN-20-10-15	HLPN-40-10-40	HLPN-80-10-80
Wavelength <sup>1</sup> , nm	2050/ 2060		
Linewidth, nm	<1		
Polarization	Linear, >500:1		
Max. Average Power, W	15	40	80
Max. Pulse Energy, mJ	20 (0-500 Hz) 10 (at 1.5 kHz) 1 (at 15 kHz)	40 (0-500 Hz) 20 (at 2 kHz) 2 (at 20 kHz)	80 (0-500 Hz) 40 (at 2 kHz) 4 (at 20 kHz)
Pulse Width, ns	10-500		
Max. Peak Power, MW	2	4	8
Repetition Rate, kHz	0-40		
Beam Quality, M <sup>2</sup>	<1.1	<1.2	<1.3
Output Beam Size, mm	~1.1	~1.3	~1.5

### General Characteristics

	50 W Tm Fiber Laser	120 W Tm Fiber Laser	(2) 120 W Tm Fiber Laser
Pump Laser	50 W Tm Fiber Laser	120 W Tm Fiber Laser	(2) 120 W Tm Fiber Laser
Laser Head Dimensions (WxLxH), mm	170 x 130 x 40	320 x 325 x 80	320 x 430 x 80
Pump Laser Cooling <sup>2</sup>	Water-cooled <sup>3</sup>		
Laser Head Cooling	Conductive	Water-cooled <sup>4</sup>	
Supply Voltage 50-60 Hz, VAC	Single-phase, 110 - 240	Single-phase, 208 - 240	

<sup>1</sup> Nonlinear conversion to 2<sup>nd</sup> through 8<sup>th</sup> harmonics is available upon request

<sup>2</sup> Water Chiller is not included

<sup>3</sup> Optional Air-cooling is available upon request

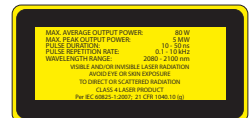
<sup>4</sup> Optional Air or conductive cooling is available upon request

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The Power to Transform<sup>®</sup>

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