NANOPEAK 20SM

20W Single-Mode MOPA Nanosecond Pulsed Fiber Laser





Features & Benefits

- Single-mode output operations
- Unique phosphosilicate gain fiber technology photodarkening-free performances guarantee long-term stability
- Adjustable delivery cable available up to 5 m better flexibility and integration into your production line
- Range of pulses for various applications offers flexibility and complete control
- Pulse waveform selection pulse widths from 4 to 200 ns
- Output turndown of 5% offers great flexibility
- Wide range of repetition rates allows maximum peak power and pulse energy for each waveform setting
- Generates small spot sizes (M² < 1.3) ideal for micromachining
- Excellent isolator design safe processing of any material
- · Maximum pulse energy: 0.7 mJ
- Maximum peak power: 15 kW
- Compact and robust enhancing the ease of OEM integration
- Easy-to-use, Plug & Play design
- Maintenance-free
- 3-year standard warranty

Applications

- · Laser marking and engraving
- Fine cutting
- Laser layer removal

Please note that the product may differ slightly from the image.

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Specifications

Optical	
Mode of Operation	Pulsed
Polarization	Random
Operating Wavelength (nm)	1064
Nominal Output Power (W)	20.5 ± 1.0
Power Stability (%)	< 3
Output Power Tuning Range (%)	5 - 100
Maximum Peak Power (kW)	15
Maximum Peak Energy (mJ)	0.7
Pulse Width Range (ns)	4 - 200
Repetition Rate Range (kHz)	1.6 - 1000
Beam Quality (M²)	< 1.3
Beam Diameter (mm)	6 - 9
CW Mode	No
Laser on Time (μm)	1

Electrical

Operating Voltage (VDC)	24 ± 1
Operating Current (A)	< 5

Mechanical & Environmental

Dimensions (W x D x H mm)	292 x 235 x 72		
Output Fiber Length (m)	2.0 - 2.5		
Output Cable Diameter	6 - 8		
Warm-up Time (sec)	10		
Operating Temperature (C°)	15 - 45		
Operating Humidity (%, rel.)	10 - 95		
Cooling Method	Air Cooled		

Pulse Repetition Rate (PRR)

Pulse Width (ns)	Minimum PRR (kHz)	Maximum PRR (kHz)	Central PRR (kHz)	
4	1.6	1000	650	
8	1.6	1000	280	
14	1.6	1000	170	
20	1.6	1000	140	
30	1.6	1000	110	
50	1.6	1000	90	
100	1.6	1000	60	
200	1.6	500	28	

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Drawing

