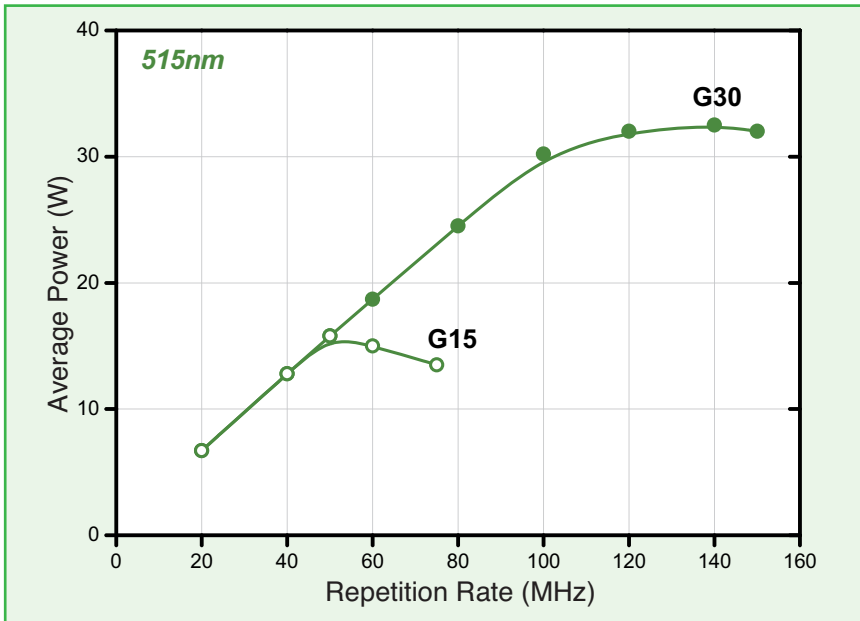


BOREAS

Green



NANOSECOND HIGH POWER FIBER LASER

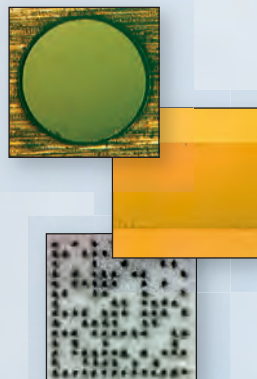


Key Features

High Power	over 30W at 515 nm
High repetition rate	up to 150 kHz
Short ns pulses	down to 12 ns
Excellent beam quality	$M^2 < 1.2$ over full repetition rate
Superior power stability	2% over 8 hours
24/7 industrial design	

Applications

- Solar cell edge isolation
- Metal wrap through
- Thin film scribing
- Glass cutting
- c-Si wafer processing
- Ceramic drilling
- Deep engraving



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NANOSECOND HIGH POWER FIBER LASER

Laser characteristics	G15	G30
Wavelength	515 nm	515 nm
Max average power*	15 W	30 W
Repetition rate	20-75 kHz	20-150 kHz
Energy per pulse**	0.3 mJ	0.3 mJ
Pulse width**	< 12 ns	< 12 ns
Beam quality M ² over full frequency range	< 1.2	< 1.2
Polarization	> 99 % linear	> 99 % linear
Beam circularity	> 95 %	> 95 %
Beam diameter	2 mm	2 mm
Beam divergence (half angle)	0.2 mrad	0.2 mrad
Average power stability over 8 h (RMS 1σ)	< 2 %	< 2 %
Pulse to pulse energy stability (RMS 1σ)	< 3 %	< 3 %
Bore sight accuracy	1 mm & 5 mrad	1 mm & 5 mrad
Beam pointing stability (RMS 1σ, in % divergence)	2 %	2 %
	* **	@50 kHz up to 75 kHz
		@100 kHz up to 100 kHz

General characteristics	G15	G30
Laserhead size in mm	995 x 290 x 110	
Power supply size in mm	19 inch 6U rack - 483 x 266 x 605	
Laserhead Weight	35 kg	35 kg
Power supply Weight	33 kg	33 kg
Cooling type	water cooled	
Electrical power consumption	Max 600 W	Max 1000 W
Power requirement	100 V / 240V, 50/60 Hz single phase	
Fiber & cable length (from power supply to laser head)	Fibre length = 5 m, RF / Dsub25 = 5 m	
Interfaces	USB and RS232	
Cooling requirement	800 W max. heat load	900 W max. heat load

OPTIONS

External shutter, Attenuator, Multimode fiber delivery

