

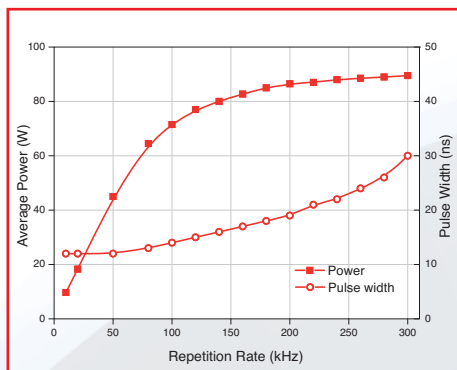
BOREAS

HIGH POWER SHORT PULSE FIBER LASER

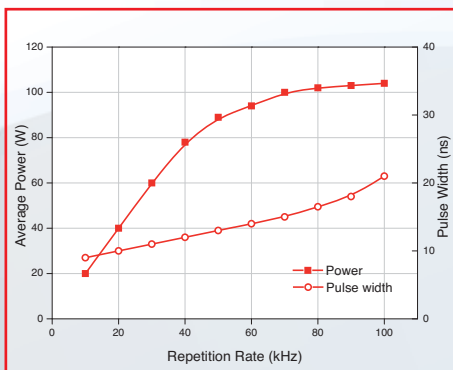


IR 1030 nm

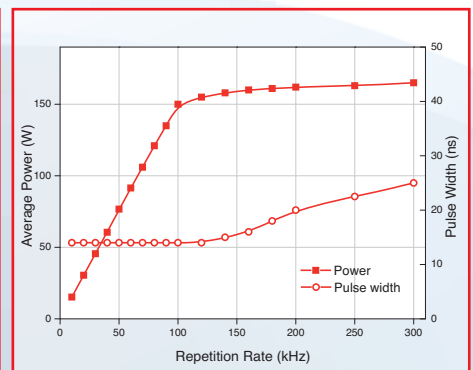
Laser characteristics	HE-IR40	HF-IR60	HE-IR80	HP-IR150	HP-IR300
Average power	> 40W @ 50kHz	> 60W @ 100kHz	> 80W @ 100kHz	> 150W @ 100kHz	> 300W @ 100kHz
Repetition rate	10 to 50kHz	20 to 300kHz	10 to 100kHz	20 to 300kHz	20 to 600kHz
Energy per pulse	Up to 2.0mJ	Up to 0.8mJ	Up to 2.0mJ	Up to 1.5mJ	Up to 3.0mJ
Pulse width	10ns @ 20kHz	15ns @ 100kHz	10ns @ 40kHz	15ns @ 100kHz	15ns @ 100kHz
Beam quality	$M^2 < 2.0$	$M^2 < 1.3$	$M^2 < 2.5$	$M^2 < 1.5$	$M^2 < 1.5$
Beam diameter ($1/e^2$, mm)	2.0mm	2.0mm	2.0mm	1.5mm	1.5mm
Beam divergence (FA, mrad)	1.3mrad	0.8mrad	1.6mrad	1.0mrad	1.0mrad
Polarization	> 98% linear	> 98% linear	> 98% linear	> 98% linear	mixed
Beam pointing stability	< 10 μ rad				
Pulse to pulse stability	< 2% RMS				



Typical performance curves
BOREAS HF-IR60 1030nm



Typical performance curves
BOREAS HE-IR80 1030nm



Typical performance curves
BOREAS HP-IR150 1030nm

Operation characteristics	HE-IR40	HF-IR60	HE-IR80	HP-IR150	HP-IR300
Laser size / Weight	A-Type / 20kg	B-Type / 20kg	A-Type / 20kg	D-Type / 40kg	On request
Power supply size / Weight	19 inch rack - 5U / 25kg				On request
Cooling type	Water 5l/min, 3 bars between 18°C and 30°C				On request
Power Consumption	500W	1000W	1000W	1500W	3000W
Power requirement	90-240 V AC / 50-60Hz			180-240 V AC / 50-60Hz	

