

SPECIFICATIONS ¹⁾

Model	Atlantic GR2	Atlantic GR3HE	Atlantic GR12	Atlantic GR25	Atlantic GR40
GENERAL SPECIFICATIONS					
Wavelength	532 nm (optional 1064 nm output ²⁾)				
Laser pulse repetition rate (PRR _L) range ³⁾	100 – 1000 kHz	30 kHz	200 – 1000 kHz	300 – 1000 kHz	400 – 1000 kHz
Pulse repetition rate after frequency divider	PRR = PRR _L / N, N=1, 2, 3, ... , 1025				
Maximal average output power ⁴⁾	2 W	3 W	12 W	25 W	40 W
Pulse energy at lowest PRR _L ⁴⁾	20 μJ	100 μJ	60 μJ	85 μJ	100 μJ
Pulse contrast	> 500 : 1				
Power long term stability over 8 h after warm-up (Std. dev.) ⁵⁾	< 1.0 %				
Pulse energy stability (Std. dev.) ⁶⁾	< 1.5 %	< 2.0 %			
Pulse duration (FWHM) at 1064 nm	10 ± 3 ps				
Polarization	linear, vertical 100 : 1				
M ²	< 1.3				
Beam circularity, far field	> 0.85				
Beam divergence, full angle	< 1.5 mRad				
Beam pointing stability (pk-to-pk) ⁷⁾	< 50 μRad				
Beam diameter (1/e ²) at 50 cm distance from laser aperture	1.2 ± 0.2 mm	2.2 ± 0.3 mm			
Triggering mode	internal / external				
Pulse output control	frequency divider (down to single shot), arbitrary pulse selection, power attenuation				
Control interfaces	keypad / USB / RS232 / LAN				
OPERATING REQUIREMENTS					
Mains requirements	100...240 V AC, single phase 47...63 Hz				
Maximal power consumption	< 0.5 kW	< 2.8 kW	< 2.8 kW	< 3.1 kW	< 3.5 kW
Operating ambient temperature	18–27 °C				
Relative humidity	10–80 % (non-condensing)				
Air contamination level	ISO 9 (room air) or better				
PHYSICAL CHARACTERISTICS					
Cooling	air	water			
Laser head size (W × H × L)	372 × 158 × 590 mm	396 × 173 × 926 mm			
Power supply unit size (W × H × L)	471 × 153 × 511 mm	553 × 1019 × 852 mm			
Umbilical length	3 m	4 m			
CLASSIFICATION					
Classification according EN60825-1	CLASS 4 laser product				

¹⁾ Due to continuous improvement, all specifications are subject to change without notice. Parameters marked typical are not specifications. They are indications of typical performance and will vary with each unit we manufacture. Unless stated otherwise, all specifications are measured at 532 nm.

²⁾ For optical specifications of the 1064 nm output please refer to the equivalent column at the Atlantic IR specification sheet.

³⁾ When frequency divider is set to transmit every pulse.

⁴⁾ See typical power and energy curves for other pulse repetition rates.

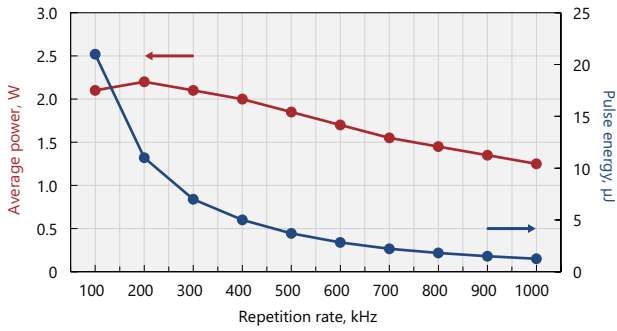
⁵⁾ At the lowest PRR_L after warm-up under constant environmental conditions.

⁶⁾ At the lowest PRR_L under constant environmental conditions.

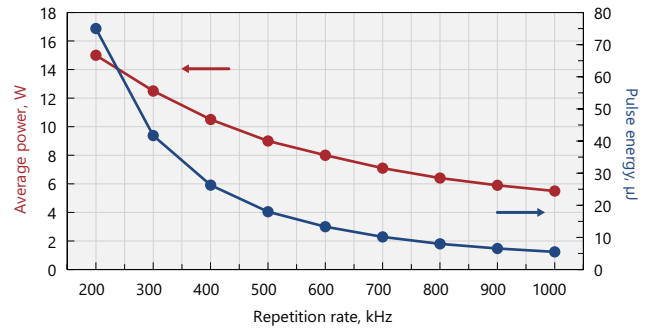
⁷⁾ Beam pointing stability is evaluated as a movement of the beam centroid in the focal plane of a focusing element.



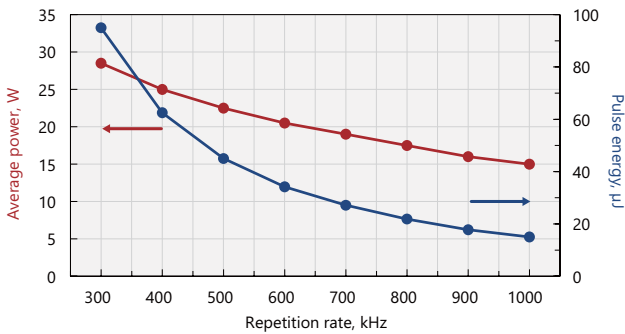
PERFORMANCE



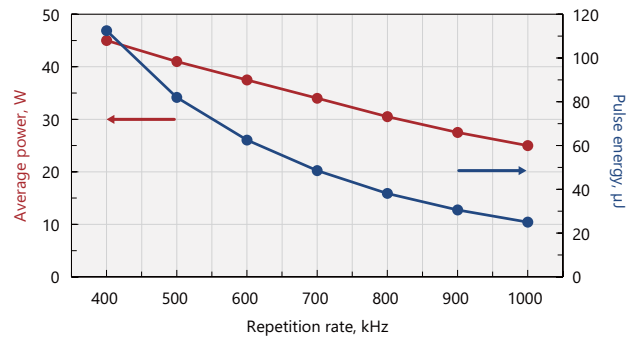
Typical output power and energy curves of Atlantic GR2



Typical output power and energy curves of Atlantic GR12



Typical output power and energy curves of Atlantic GR25



Typical output power and energy curves of Atlantic GR40