

AURORA-IR-DATASHEET

Parameter	AURORA-IR-HP	AURORA-IR-HE
Tuning range	1350 – 2000 nm (Signal)	
	2100 – 4500 nm (Idler)	
Maximum pump power	80W	
Pump pulse energy	12 – 400 μJ	400 – 2000 μJ
Conversion efficiency ¹⁾ @1550nm	> 9%, 30 – 2000 μJ	
	> 6%, 12 – 30 μJ	
Spectral bandwidth	60 – 150 cm ⁻¹ @ 1450 – 2000 nm	
Long-term power stability, 8 h ²⁾	< 2% @ 1550 nm	
Pulse-to-pulse energy stability, 1min ²⁾	< 2% @ 1550 nm	
Specified as a percentage of pump power		
Expressed as NRMSD (Normalized Root Mean Square Deviation)		
Dimensions (L×W×H)	797 x 394 x 251mm (LxWxH)	
Weight (kg)	47kg	
Remaining weight (kg)	24kg (Water-cooled machine) +17kg (frequency doubling)	
Power supply requirements	AC 220V/10A; 24V DC power supply, motor drive power supply, total power ≤ 150W	
Power supply requirements for the water-cooled machine	CWUP-10AI; operating voltage 220V; operating current 0.6-5.6A; rated power 1.02kW; cooling capacity 0.75kW	

Wavelength Expansion (DFG)

Parameter	AURORA-IR-HP	AURORA-IR-HE
Tuning range	4500 – 16000 nm (DFG)	
Conversion efficiency ¹⁾	> 0.3% @ 10000 nm, 30 – 2000 μ J	
	> 0.2% @ 10000 nm, 12 – 30 μ J	
Spectral bandwidth	60 – 120 cm^{-1} @ 5000 – 8000 nm	

1) Specified as a percentage of pump power