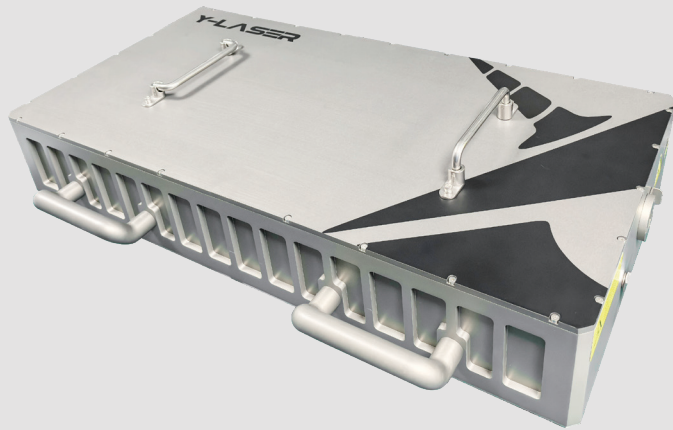


HYPERION-G

High-Energy Nonlinear Pulse Compressor



Pulse width compressed to $<35\text{fs}$, suitable for ultrafast laser applications

Supports cascading with HCF systems to meet various application requirements

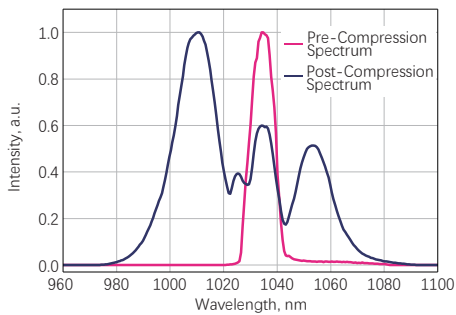
$<0.5\%$ RMS power fluctuation over 24 hours, ensuring 24/7 long-term stable operation

Compression efficiency $>90\%$, maintaining high energy density output

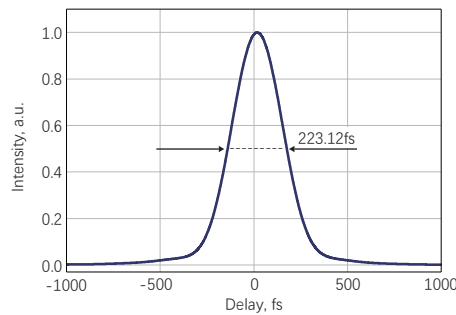
Easy operation without complex adjustments, adaptable to various environments

Suitable for high-end applications such as micro/nano machining and precision manufacturing

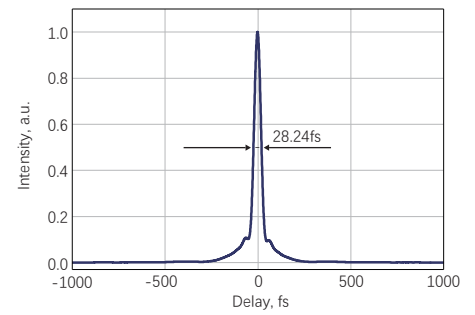
HYPERION-G-HP Typical Output Spectrum



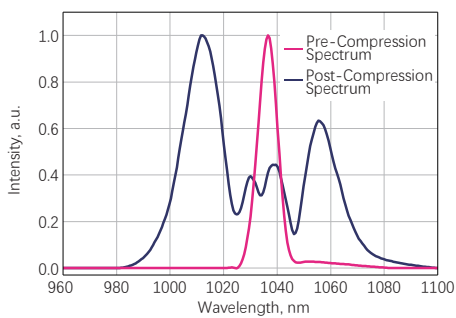
HYPERION-G-HP Typical Input Pulse Width



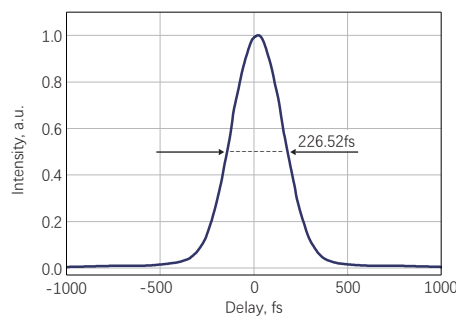
HYPERION-G-HP Typical Output Pulse Width



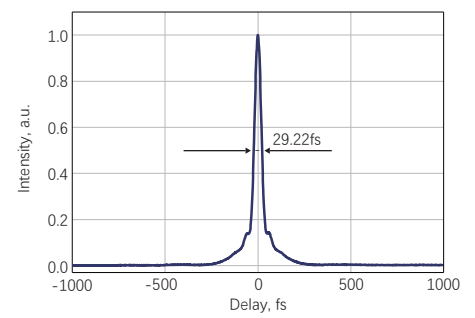
HYPERION-G-HE Typical Output Spectrum



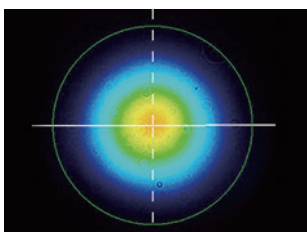
HYPERION-G-HE Typical Input Pulse Width



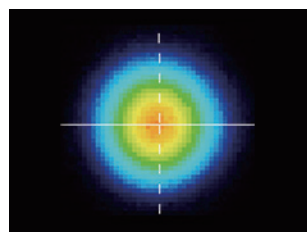
HYPERION-G-HE Typical Output Pulse Width



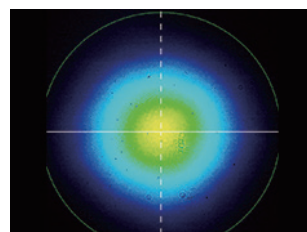
HYPERION-G-HP Near-Field Beam Profile



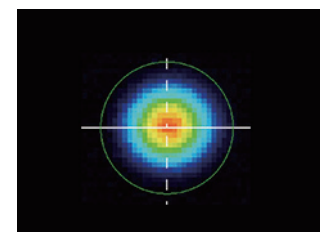
HYPERION-G-HP Far-Field Beam Profile



HYPERION-G-HE Near-Field Beam Profile



HYPERION-G-HE Far-Field Beam Profile



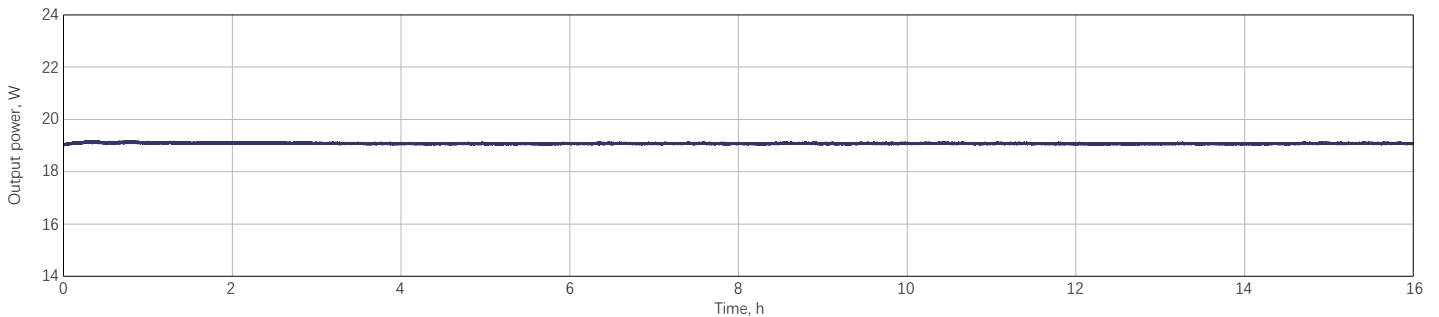
HYPERION-G High-Energy Nonlinear Pulse Compressor

Specifications

Parameter	HYPERION-G-HP	HYPERION-G-HE
Incident pulse width	150fs-1ps	
Incident pulse energy	20 - 400 μ J	400 - 2000 μ J
Incident laser central wavelength	1036 \pm 5nm	
Maximum compatible power	80W	
Typical compression ratio	5 - 10	
Compressor efficiency	> 90%	
Typical output pulse width	< 35fs	
Compatibility	Can be cascaded with HCF system to output few-cycle pulses	
Dimensions	490 \times 353 \times 135mm (L \times W \times H)	958 \times 416 \times 222mm (L \times W \times H)
Weight	61kg	85kg
Remaining weight	24kg (Water-cooled machine)	
Power supply requirements	AC 220V/10A	
Power supply requirements for the water-cooled machine	220V/0.6-5.6A/10.2kW (CWUP - 10AI)	

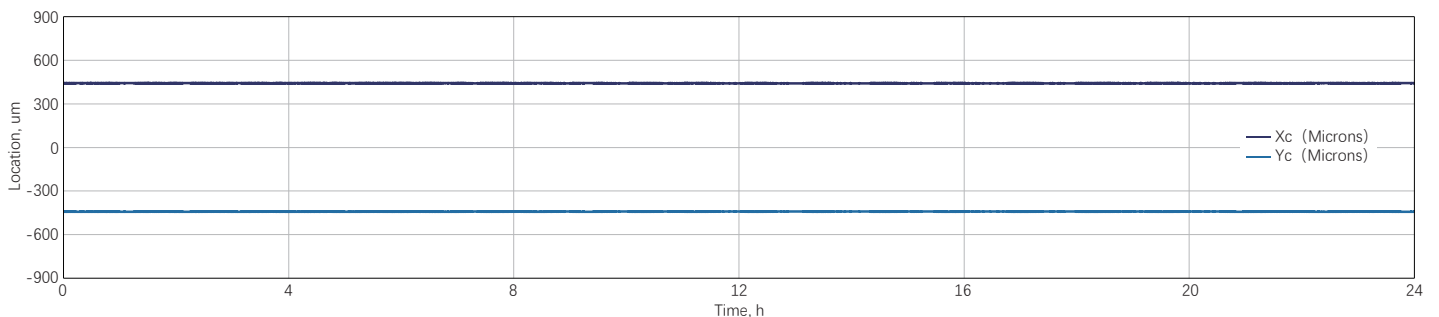
HYPERION-G-HP

Power Stability: RMS=0.089%@16h-19.087W/190.8 μ J/100kHz



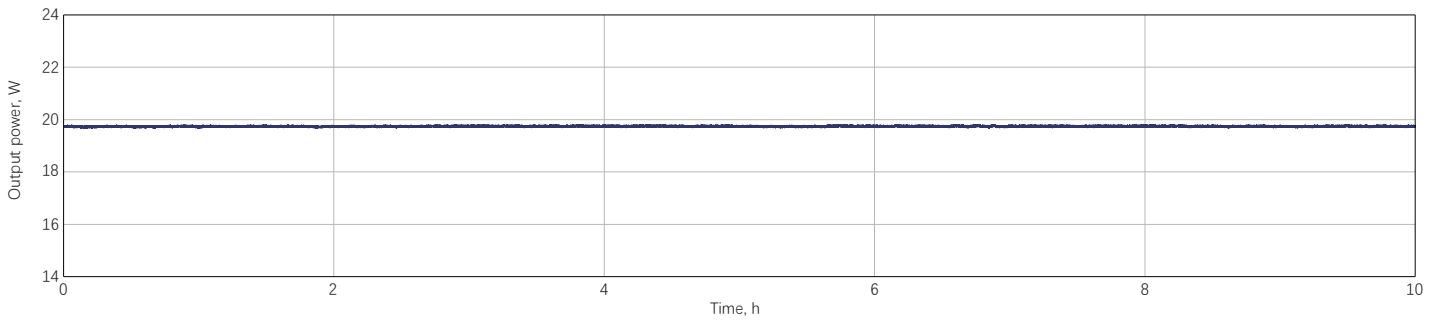
HYPERION-G-HP

Pointing Stability: RMS=3.11 μ m@24h-19.087W/190.8 μ J/100kHz



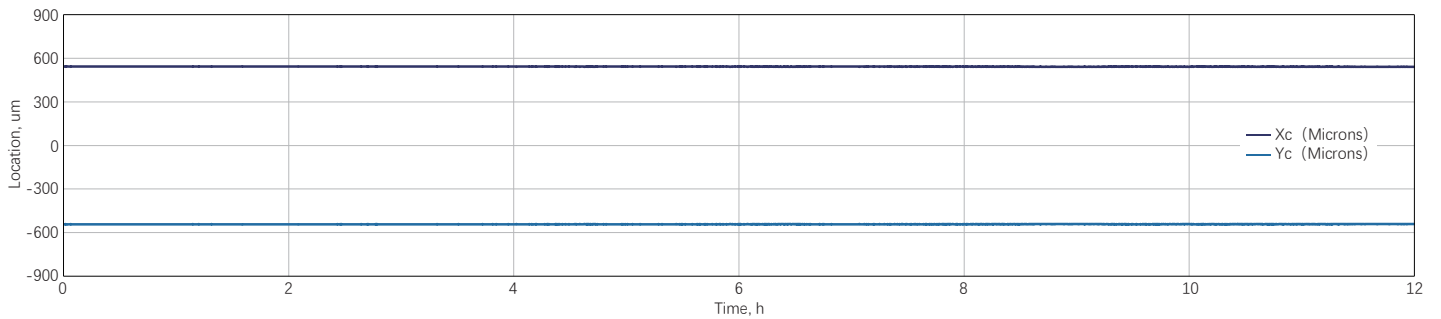
HYPERION-G-HE

Power Stability: RMS=0.0455%@16h-19.74W/1.97mJ/10kHz



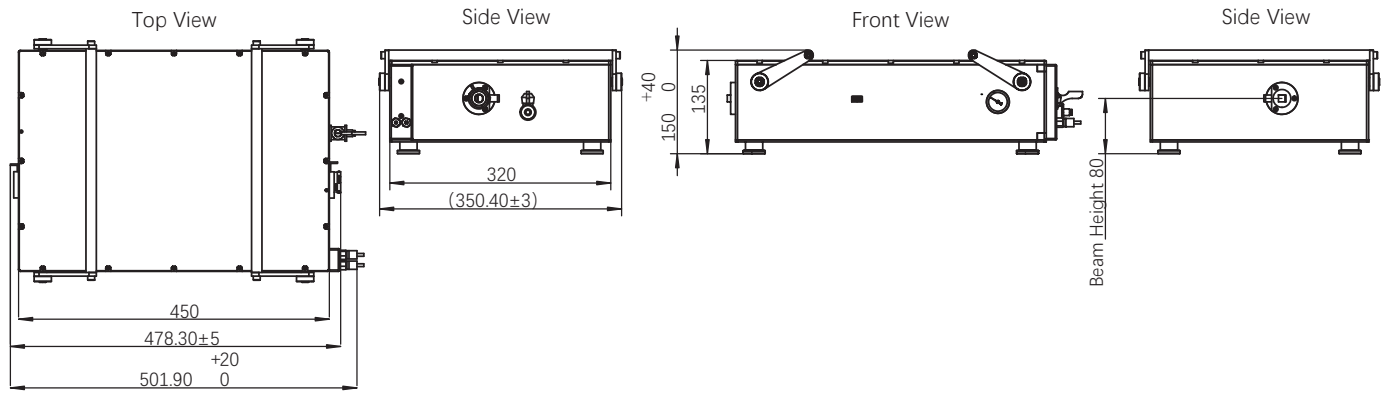
HYPERION-G-HE

Pointing Stability: RMS=1.86µm@24h-19.74W/1.97mJ/10kHz



Drawings

HYPERION-G-HP Outline Drawing



HYPERION-G-HE Outline Drawing

