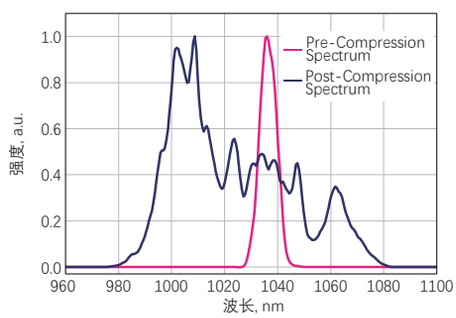
HYPERION-S

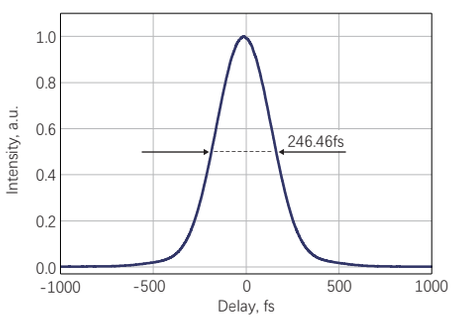
High-Power Nonlinear Pulse Compressor

- Pulse width compressed to <50 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 >85%, 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

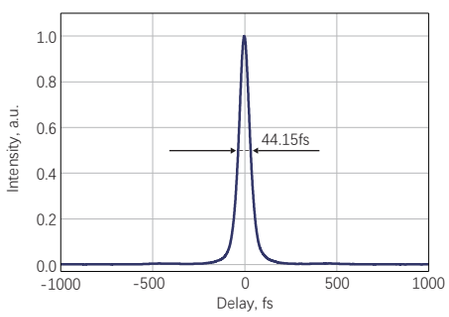
HYPERION-S Typical Output Spectrum



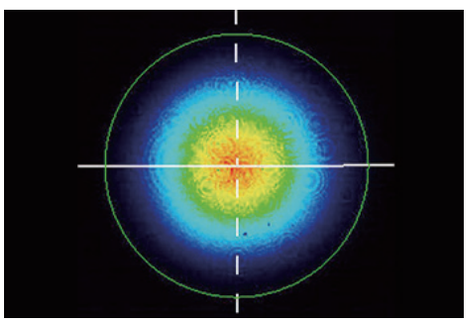
HYPERION-S Typical Input Pulse Width



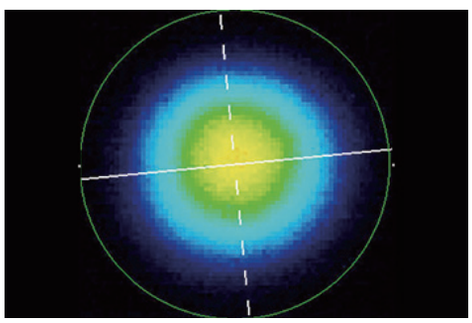
HYPERION-S Typical Output Pulse Width



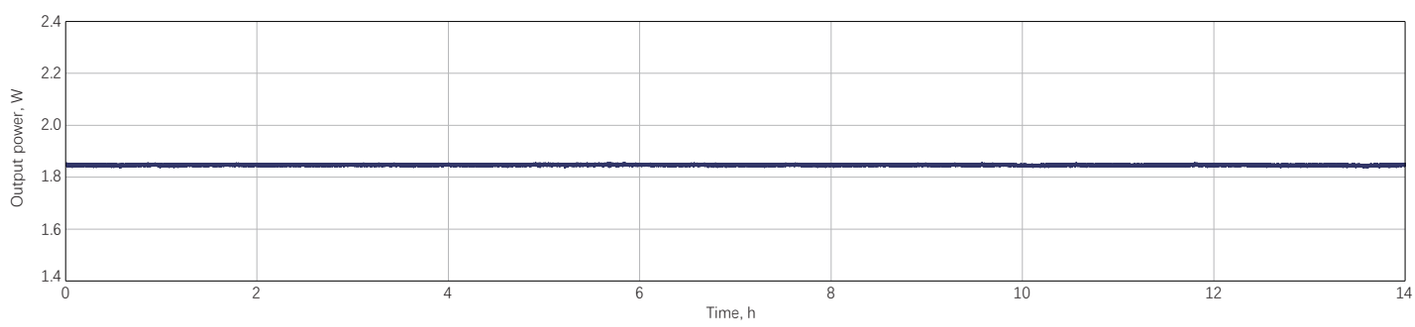
HYPERION-S Near-Field Beam Profile



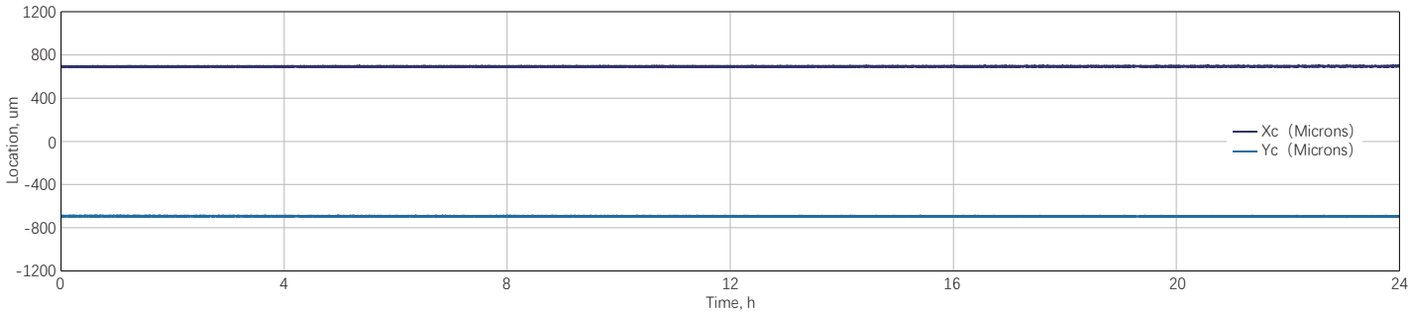
HYPERION-S Far-Field Beam Profile



HYPERION-S
Power Stability: RMS=0.0946%@14h-1.847W/18.43μJ/10kHz



HYPERION-S
Pointing Stability: RMS=3.51μm@24h-1.847W/18.43μJ/100kHz



Specifications

Parameter	HYPERION-S
Incident pulse width	150fs - 1ps
Incident pulse energy	10 - 20μJ (5 - 10μJ optional)
Incident laser central wavelength	1036 ± 5nm
Maximμm compatible power	80W
Typical compression ratio	5 - 10
Compressor efficiency	> 85%
Typical output pulse width	< 50fs
Compatibility	Can be cascaded with HCF system to output few-cycle pulses
Dimensions (L×W×H)	425 × 270 × 146mm (L×W×H)
Weight (kg)	19.3kg
Remaining weight (kg)	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)

Drawings

HYPERION-S Outline Drawing