

Second Harmonic Bandwidth Compressor



Narrowband 515 nm output

Picosecond pulses from femtosecond pump

< 10 cm⁻¹ or < 2 cm⁻¹ spectral bandwidth

Compact footprint

Specifications

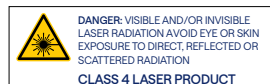
NEW

Model	SHBC ¹⁾	SHBC-NB
OUTPUT CHARACTERISTICS		
Output wavelength ²⁾	515 nm ± 5 nm	
Conversion efficiency	> 30%	> 6% @ 3 – 6 µJ pump > 10% @ 6 – 30 µJ pump > 15% @ 30 – 200 µJ pump
Spectral bandwidth	< 10 cm ⁻¹	< 2 cm ⁻¹
Pulse duration	2 – 4 ps ³⁾	50 – 100 ps
PUMP LASER REQUIREMENTS		
Pump source	PHAROS or CARBIDE with uncompressed output	PHAROS or CARBIDE
Repetition rate	Single-shot – 1 MHz	
Pump pulse energy	40 µJ – 4 mJ	3 – 200 µJ
Maximum pump power	40 W	10 W
DIMENSIONS		
Housing (L × W × H)	426 × 351 × 119 mm	400 × 195 × 187 mm

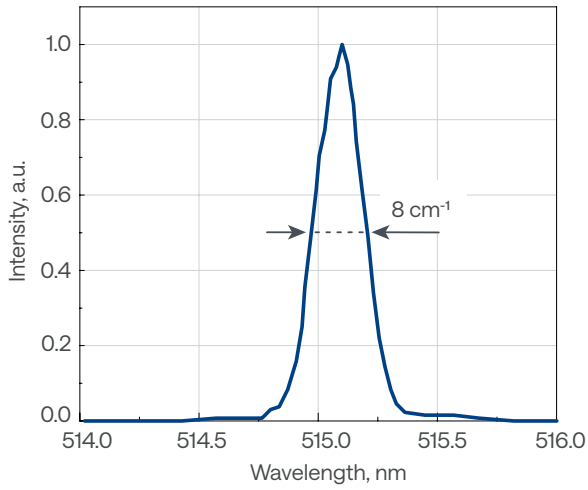
¹⁾ Used to pump ORPHEUS-PS.

²⁾ Depends on pump laser model.

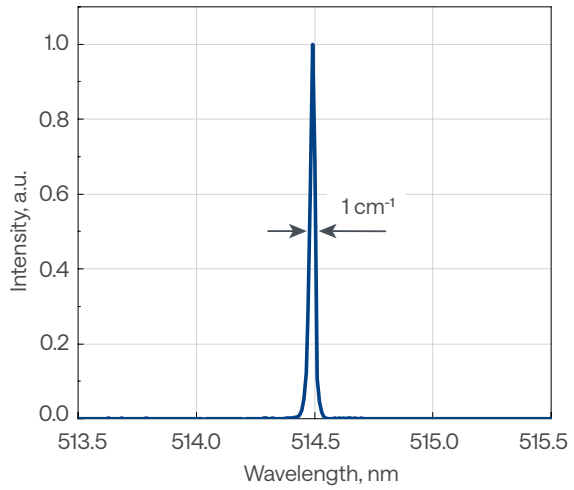
³⁾ SHBC can be adjusted to shorter pulse durations at the expense of narrow spectral bandwidth.



SHBC typical output spectrum

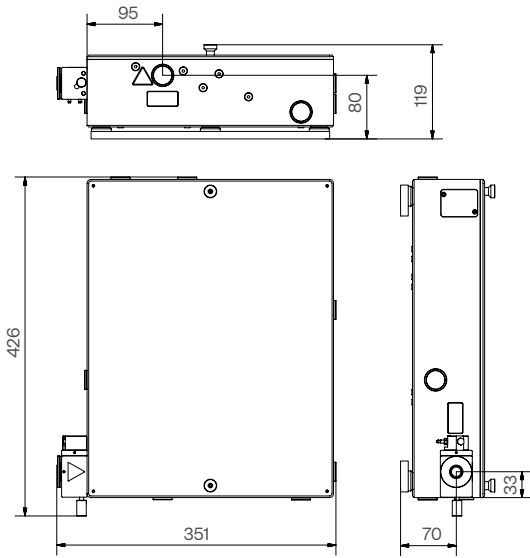


SHBC-NB typical output spectrum



Drawings

SHBC drawing



SHBC-NB drawing

