

Second Harmonic Bandwidth Compressor



Narrowband 515 nm output

Picosecond pulses from a femtosecond pump

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

Compact footprint

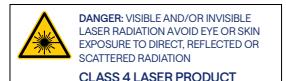
Specifications

Model	SHBC-515	SHBC-NB
OUTPUT CHARACTERISTICS		
Output wavelength ¹⁾	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 ²⁾	50 – 100 ps
PUMP LASER REQUIREMENTS		
Pump laser	PHAROS or CARBIDE with uncompressed output ³⁾	PHAROS or CARBIDE ³⁾
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
Input height	70 mm	125 mm
Output height	80 mm	125 mm

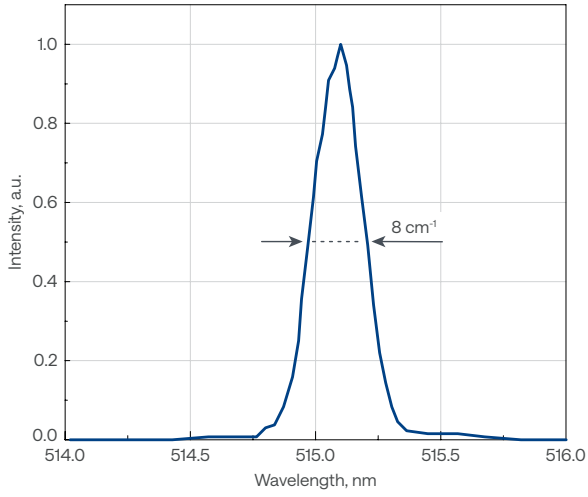
¹⁾ Depends on pump laser model.

²⁾ SHBC-515 can be adjusted to shorter pulse durations at the expense of narrow spectral bandwidth.

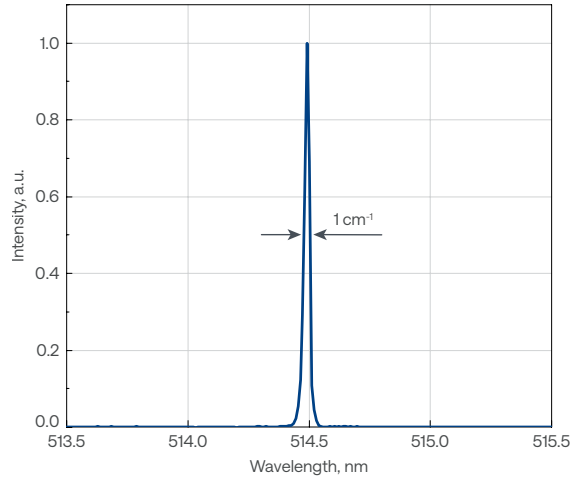
³⁾ Not compatible with PHAROS-UP.



SHBC-515 typical output spectrum

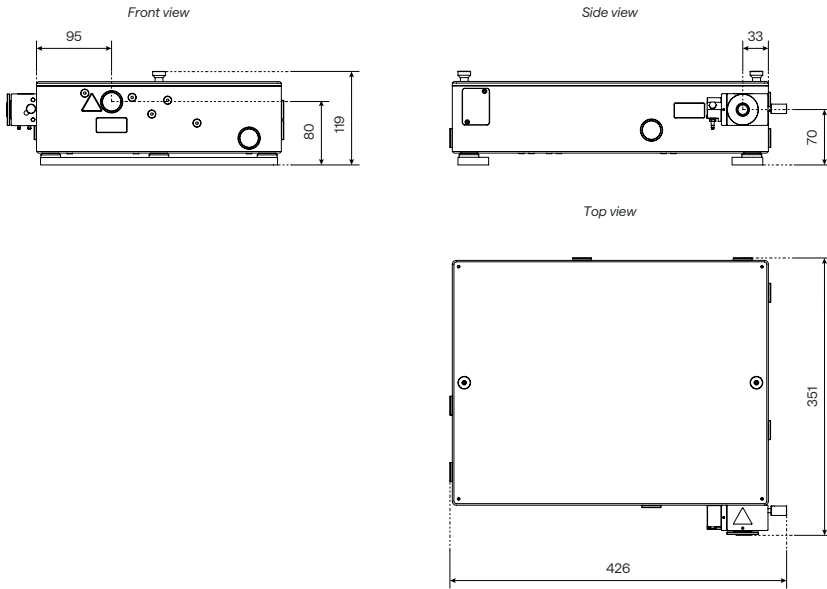


SHBC-NB typical output spectrum



Drawings

SHBC-515 drawing



SHBC-NB drawing

