

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

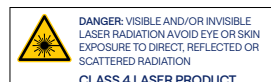
Specifications

| 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 |

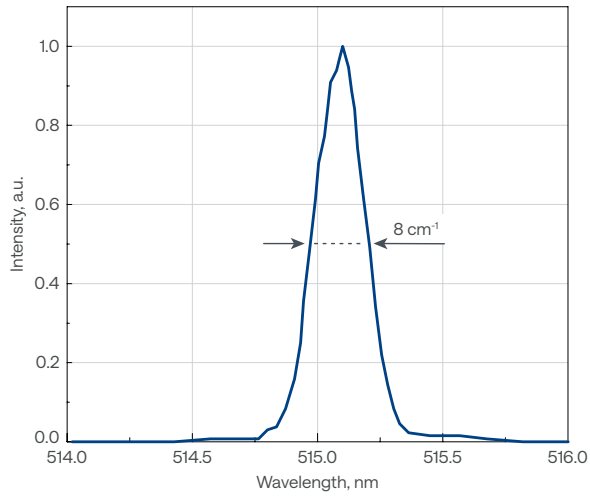
¹⁾ Depends on pump laser model.

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

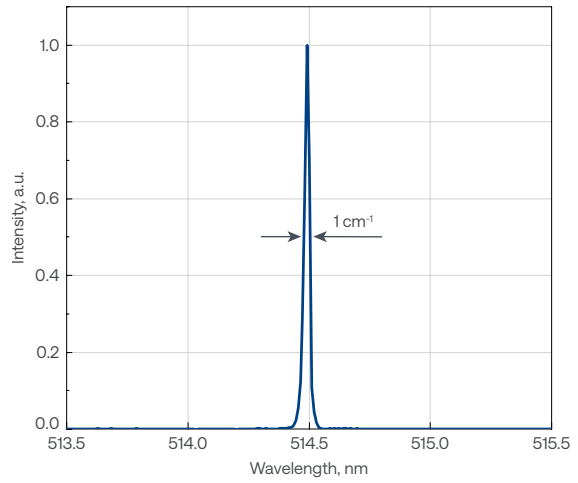
³⁾ Not compatible with PHAROS-UP.



SHBC-515 typical output spectrum

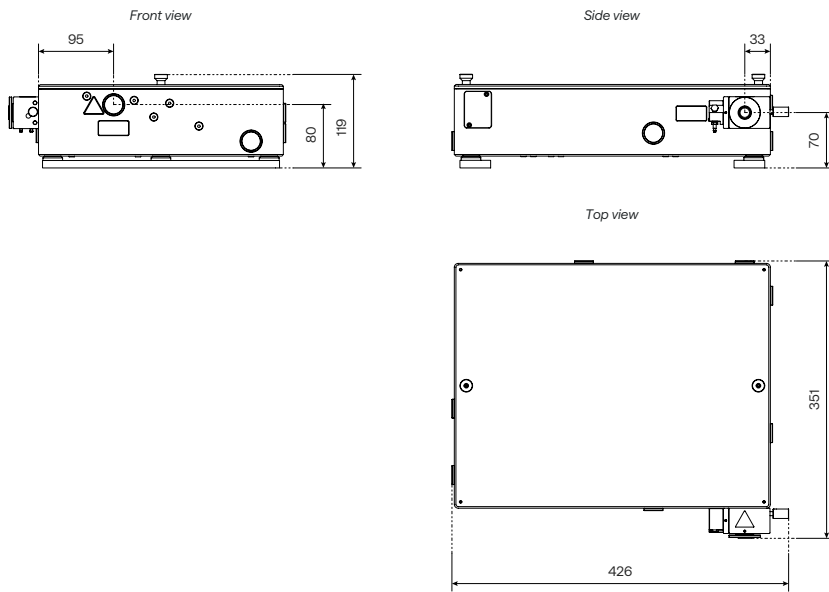


SHBC-NB typical output spectrum



Drawings

SHBC-515 drawing



SHBC-NB drawing

