

SM Series Supercontinuum White Light Source

Our SM series is a broadband laser intended for everyday use in labs. They are an effective replacement for lamp, SLEDs, mode-hop tunable laser because they reach multiple wavelengths with a flat, stable, broadband spectrum with a fibered output. Turn-key benchtop or compact OEM packaging, maintenance-free, robust and user-friendly, these sources are convenient for general purpose applications.

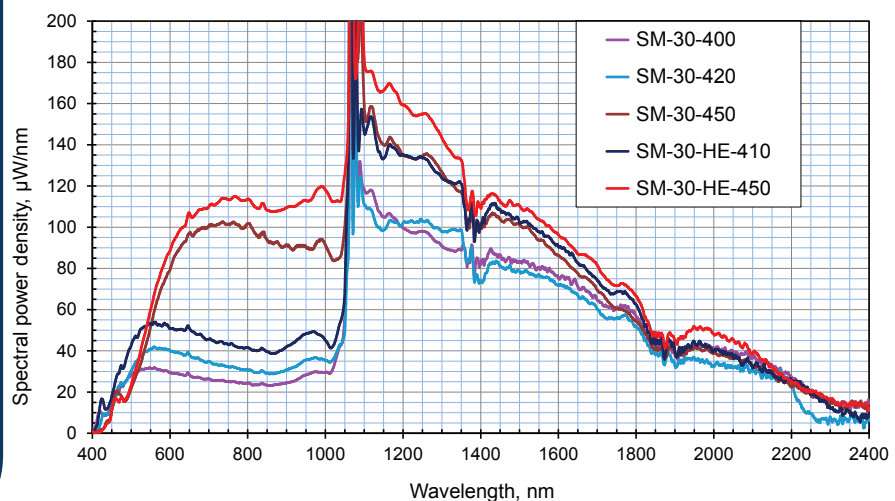
FEATURES

- From visible to IR
400 nm - 2400 nm
- High spatial coherence
singlemode TEM00
- Free-running or externally
triggerable
- High energy per pulse > 3 μ J
- Total average power
up to 250 mW
- Maintenance-free
- Reliable all fibered compact
broadband source

APPLICATIONS

- Optical component testing
- OCT (Optical Coherence
Tomography)
- Spectroscopy
- Metrology, LIDAR
- High resolution imaging

**NEW cost effective solution
From 400 to 2400 nm
Up to 250 mW**



SM Series

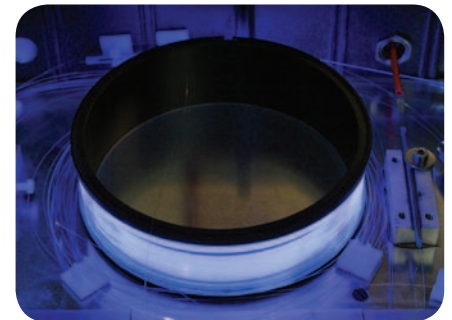
Supercontinuum White Light Source

	SM-30-400	SM-30-420	SM-30-450	SM-30-HE-410	SM-30-HE-450
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Optical specifications						
Spectral bandwidth	min	< 400 nm	< 420 nm	< 450 nm	< 410 nm	< 450 nm
	Max	> 2400 nm	> 2400 nm	> 2400 nm	> 2400 nm	> 2400 nm
Total average power ⁽¹⁾		> 100 mW	> 120 mW	> 150 mW	> 130 mW	> 170 mW
Total Visible power ⁽¹⁾		> 10 mW	> 12 mW	> 30 mW	> 15 mW	> 30 mW
Seed repetition rate ⁽²⁾		> 25 kHz (typical ~ 30 kHz)				
Triggerable range ⁽³⁾		1 Hz up to > 15 kHz (typical ~ 20 kHz)				
Timing jitter ⁽⁴⁾		< 2µs				
Power stability ⁽⁵⁾		+/- 1 %				
Seed pulse width		~ 1 ns			> 1 ns	
Spatial mode		Singlemode Gaussian TEM00				
Polarization state		Unpolarized				
Laser output		FC/APC (> 1 meter armored cable)				
Synchronization output		External Trigger Output				

OPTIONS

- 1 Laser output
FC/APC or FC/PC or other, or collimated output (lens or achromatic)
- 2 Automatic Power Control: APC mode of operation 10%-100%
- 3 Output pigtail length ~ 2 m
- 4 Jitter optimization < 500 ns (pulse to pulse)
Optimization at one repetition rate other than nominal (> 500 Hz)
- 5 Laser optimization at another nominal repetition rate



⁽¹⁾ Power at the nominal repetition rate. Visible power measured on the range 370-850 nm.

⁽²⁾ Nominal repetition rate (maximum repetition rate) in free-running mode of operation.

⁽³⁾ 3 mode of operations: free-running (nominal), externally triggered via analog input (down to 1Hz), externally triggered via computer interface (down to 10Hz). Additional APC mode (Automatic Power Control) upon request.

⁽⁴⁾ After warm-up time.

⁽⁵⁾ Typical value of long-term stability for total average power at one fixed repetition rate, with a FC/APC connector.



INVISIBLE AND VISIBLE LASER RADIATION
AVOID EXPOSURE to BEAM
Class 3b (IIIb) Laser product

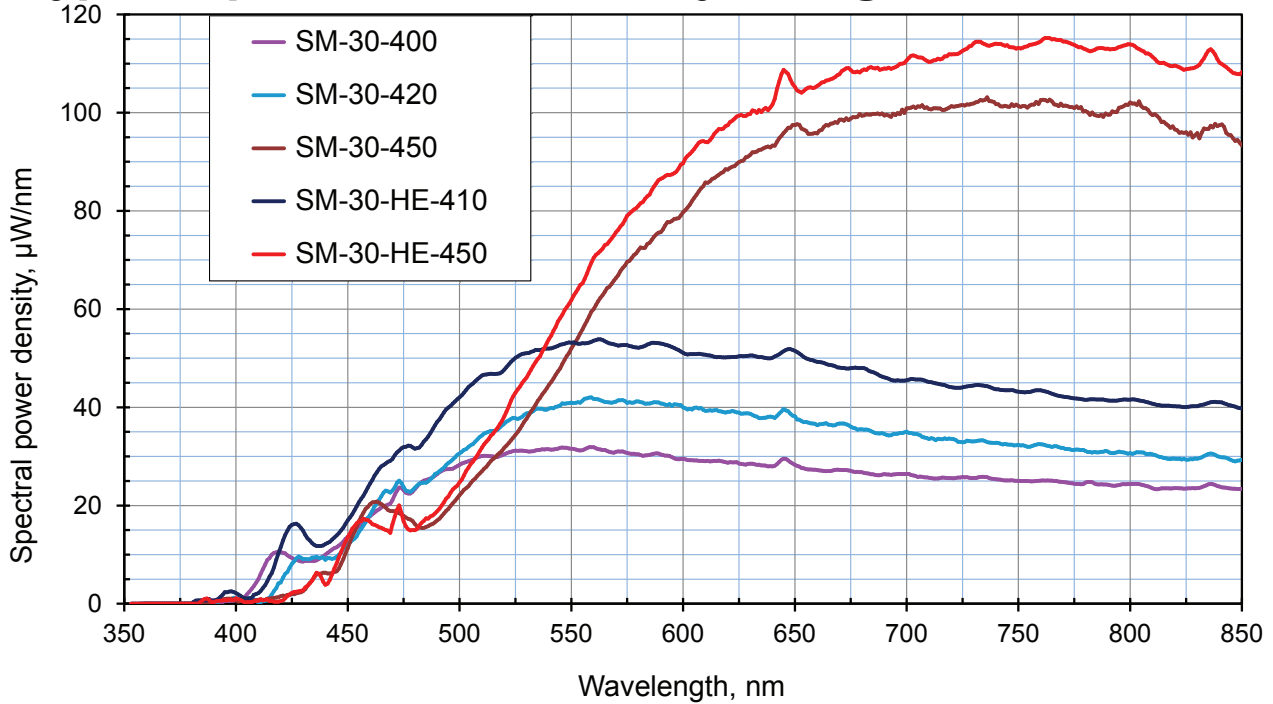
200 λ < 2400 nm - P < 200 mW - Qi > 3.2 µJ - ti < 2 ns
Class 3b (IIIb) Laser product IEC 60825.1 - 2007
Complies with 21 CFR 1040.10 and 1040.11

All specifications are subject to change without notice.

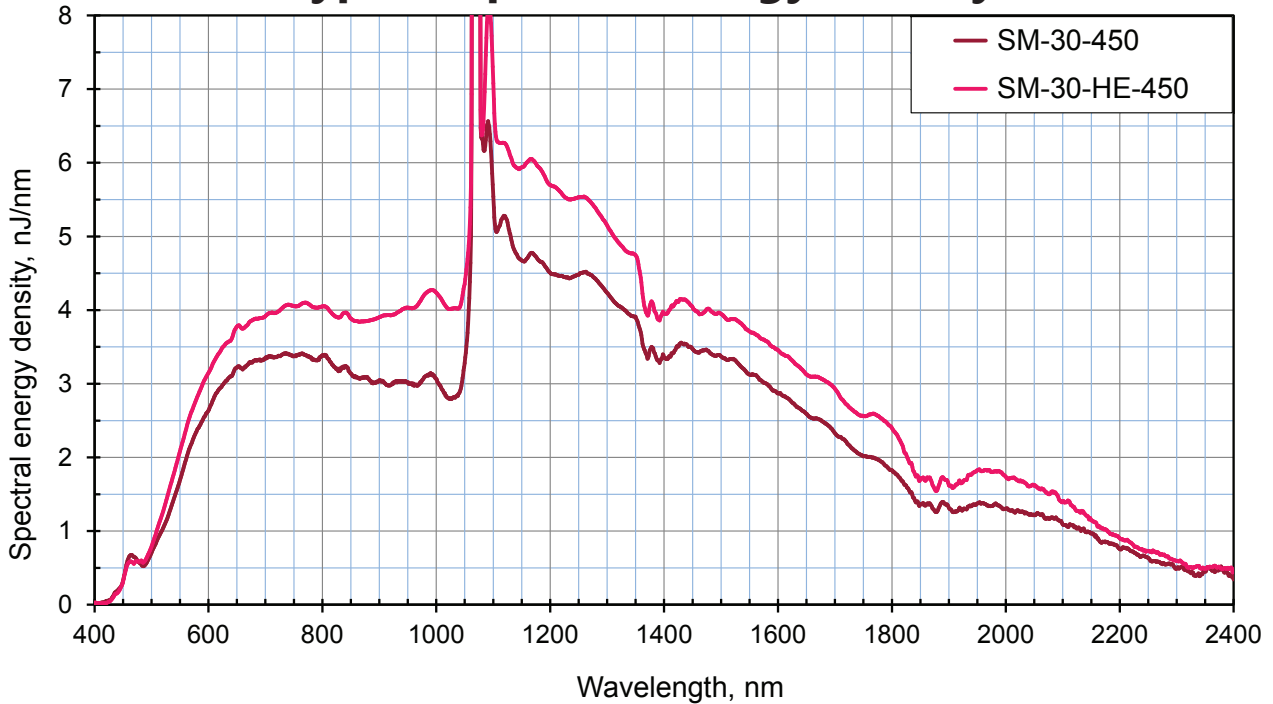
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Typical Spectral Power Density - Range 350-850 nm



Typical Spectral Energy Density



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SM Series

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SM Benchtop Turnkey Format

Mechanical/Environmental/Electrical specifications

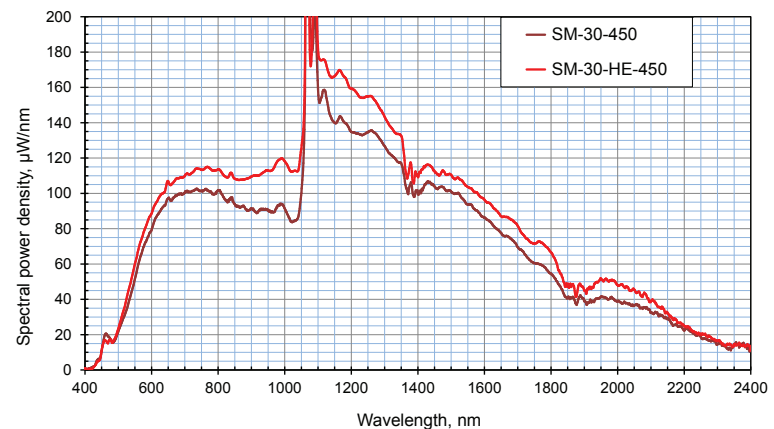
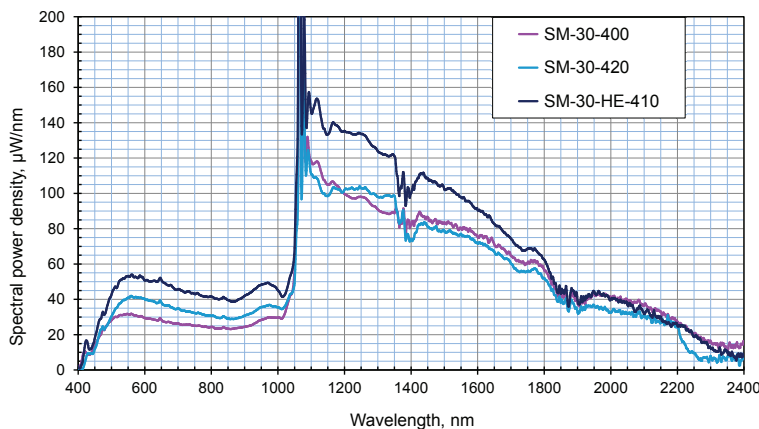
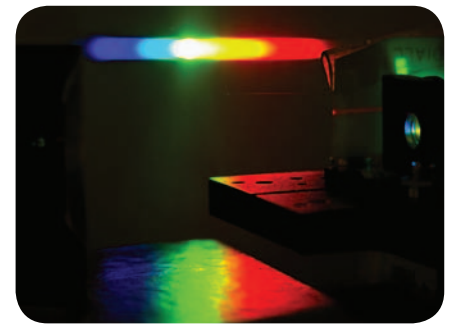
Control interface	Front panel and USB
Operating temperature	+5°C to +45°C non condensing
Weight	< 3 kg
Dimensions (LxWxH)	185x85x90 mm
Power requirements	100-240V, 50/60Hz



SCM OEM Module Format

Mechanical/Environmental/Electrical specifications

Control interface	Controller and serial port
Operating temperature	-10°C to +50°C non condensing
Humidity	80% RH up to 40°C 60% RH above 40°C
Weight - Laser module	~1 kg
Footprint - Laser module	130x85 mm
Height - Laser module	95 mm (with fan)
Weight - Controller	< 280 g
Dimensions (LxWxH) - Controller	115x90x35 mm
Power requirements	12V, 6A



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