

MiniSol™ LED Solar Simulator



The compact and easy to use MiniSol™ model LSH-7320 incorporates the benefits of LED technology in a value-priced, flexible solar simulator. The completely independent head includes all controls, LEDs, and optics allowing researchers flexible mounting and orientation options. External remote on/off triggering and long lamp life make remote mounting practical and bring LED technology to applications requiring only ABA ratings.

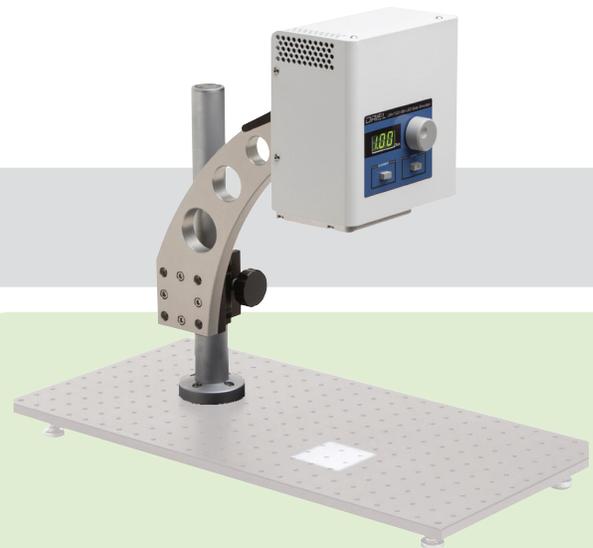
10,000 hours and do not require a long warm up time. Shuttering can be accomplished by simply turning the output on and off; no mechanical shutter is required. Careful attention to the design and the use of solid state LEDs allow the LSH-7320 to be oriented in any position providing the flexibility to fit a wide range of application needs.

Benefits of LEDs

Unlike typical lamp based solar simulators, LED based solar simulators have lamp lifetimes that can exceed

Features and Benefits

- Output beam size: 2 in. x 2 in. (51 mm x 51 mm)
- Factory certified IEC and JIS ABA Rated
- Variable output adjustment from 0.1 to 1.1 SUN
- Fast turn on time; <100 ms via USB or external trigger
- 10,000 hour LED lifetime - no bulb replacement required
- Flexible mounting orientation
- PV cell placement indicator
- USB 2.0 communication for LED control



Why Class ABA?

For applications which don't require the highest level of uniformity of illumination, a Class ABA system is a great solution. Class ABA systems still provide the highest spectral match and temporal stability performance (Class A) as defined by the most recent standards from IEC and JIS.

Put Our Expertise to Work

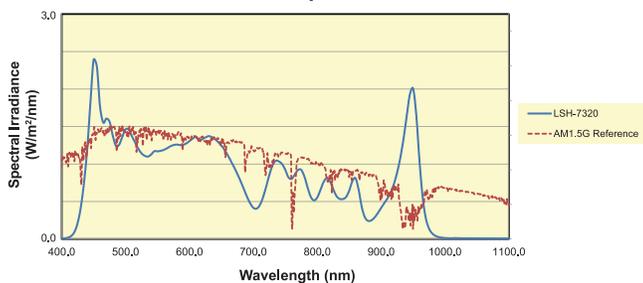
Leveraging Oriel's deep application and market understanding, the LSH-7320 Class ABA LED solar simulator was designed to provide high performance in a rugged design. Oriel is a world leader in solar simulator technology and our products are renowned for their value and strong after-sales support.

MODEL LSH-7320 SOLAR SIMULATOR SPECIFICATIONS¹

Illumination Area	2 inches x 2 inches (50 mm x 50 mm)
Maximum Power Output	110 mW/cm ² (1.1 SUN)
Variable Output Control Wavelength	0.1 to 1.1 SUN
Range	400nm - 1100nm
Temporal Stability	A - IEC 60904-9 2007, JIS 8904-9 2017
Uniformity	B - IEC 60904-9 2007, JIS 8904-9 2017
Spectral Match	A - IEC 60904-9 2007, JIS 8904-9 2017
Nominal Working Distance	12.0 inches +/- 0.5 inch; 304 +/- 12mm
Alignment	Laser diode based optical alignment
Z Axis Head Adjustment from Base	7.5 inches - 17.75 inches (190 mm - 450 mm)
Head Rotation ²	0 - 360°
Remote Interface	USB 2.0 (B-Type) or BNC TTL for ON/OFF
TTL Turn On/Off Transition Time	10ms
Weight	
Head (on vertical assembly stand)	9.3 lbs (4.2 kg)
Stand	9.0 lbs (4.1 kg)
Power Supply	1.8 lbs (0.8 kg)
Dimensions	
Height (on vertical assembly stand)	15.25 - 25.5 inches (387 - 648 mm)
Width	7.15 inches (184 mm)
Depth	14.0 inches (362 mm)
Operating Temperature Range	5°C to 40°C
Storage Temperature Range	-40°C to 70°C
Humidity	<85%, relative, non-condensing
Compliance	CE, RoHS
Power Requirements	100-240 VAC, 47-63 Hz, 2.8A max

NOTES: 1) Class A per IEC 60904-9 (2007) Section 5.4.2
 2) Indents on mounting plate at 0°, 90°, 180°, and 270° orientations

LSH-7320 Spectrum



LSH-7320 Spectral Match

