

Sun 2000 Solar Simulators

203 x 203 mm Illuminated Field Systems



Abet Technologies Model 11044 Sun 2000 210 x 210 mm Solar Simulator.

- Class A Spectral Match
- DC Xe Arc Lamp
- Gen II Optics for High Efficiency Illumination
- Extra Long Working Distance
- Digital Shutter Timer Included
- Long Life Lamps

Innovative and Complete

The Abet Gen II optical design dramatically increases the percentage of photons reaching the work plane.

All electronics are packaged in the lamp house - no clutter of high power cables to deal with. A digital shutter timer allowing both manual and external control is included with every unit.

Standard maintenance, lamp or filter replacement, does not require any tools.

Locking indicator dials on all the system controls provide for a reproducible and stable setup. A built-in beam imaging accessory assists in system alignment.

Clean Cooling

Any dust or dirt particles introduced into an optical system can degrade system performance and shorten the life of critical optical components. Sun 2000 sources utilize a HEPA filtered cooling fan to extend the life of the delicate optical components.

Adaptable

Abet Technologies offers a number of spectral and field size options to match your application. The Sun 2000 family standard offerings range from 50x50 mm to 400x400 mm 1 sun or more uniformly illuminated field versions for Photovoltaic and UV applications.

The compact design of the systems, combined with the long working distance optics, leaves the space below these instruments wide open for any sample positioning or testing equipment. Unit mounting options allow suspension from above leaving the space below totally free if needed.

Up-pointing and horizontal output direction models are also available.

Long working distances allow easy interface to vacuum boxes.

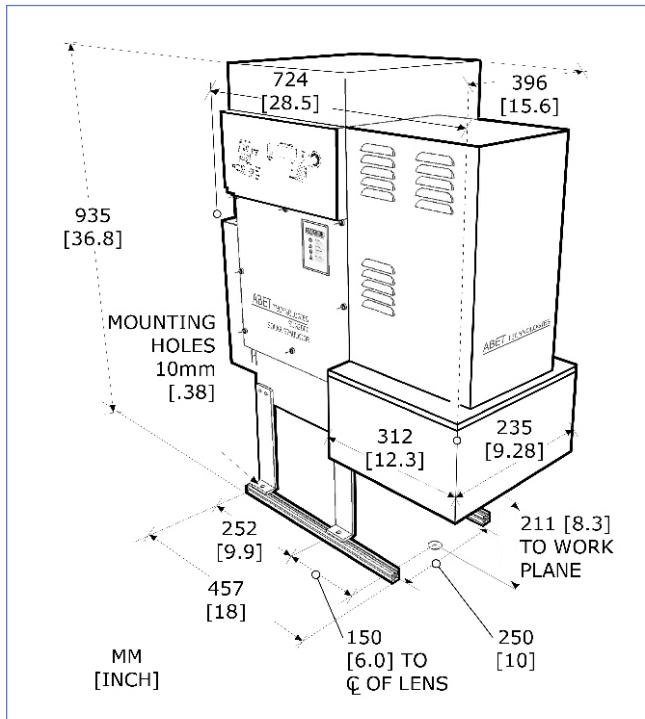
Beyond the standard AM 1.5 and AM 0 filters many other filters are offered to fine tune the spectral characteristics of the source for your particular application.

Model 11044 Specifications

Illuminated Area..... $\geq 203 \times 203$ mm
 Nominal working distance.....200 mm
 Irradiance range0.7 to 1.1 suns
 Uniformity of irradiance.....< 5%
 AM 1.5 G spectral match*.....Class A
 Stability.....< 2%
 Ozone free arc lamp1000 W
 Typical lamp life1500 hours
 HEPA filtered cooling fan included
 Built-in electronic shutter with digital timer included
 Built-in arc lamp supply included
 110/240 VAC, 50/60 Hz, 10 A max

*with 11082 1.5 G AM filter

Abet Technologies regularly continue to upgrade our products, therefore all specifications are subject to change without notice.



Dimensional diagram of the Abet Technologies model 11044 Solar Simulator

Abet Technologies offers an expanding line of ASTM, IEC and JIS standards compliant products for solar cell PV-IV testing, steady state solar simulators, test stations, software, calibrated reference cells and a selection of electronic loads for low and high current cells.

Visit www.abet-technologies.com or contact us at sales@abet-technologies.com.

Ordering Information

Model 11044 does not include a filter - please choose one of the filters below to match your test needs.

Model 11044 uses a UV exposure limiting borosilicate glass lens for operator safety. For UV requiring applications, e.g. AM0 systems, order the fused silica condenser based 11044-2 model.

The 11063 Atmospheric Absorption Filter when used with the 11044-2 Solar Simulator causes UV output to mimic UV radiation distribution on Earth please ask for details.

For just UV needs, 280-400 nm, please review the Abet UV Solar Simulators specification sheets.

11044	Full Spectrum Solar Simulator, 100 x 100 mm
11080	AM 0 filter, 70 x 70 mm
11082	AM 1.5 G filter, 3 in. dia.
11057	AM 1 D filter, 3 in. dia.
11058	AM 1.5 D filter, 70 x 70 mm
11059	AM 2 D filter, 3 in. dia.
11063	Atmospheric Absorption Filter
13024	Replacement 1000 W lamp
11051	Replacement HEPA filter