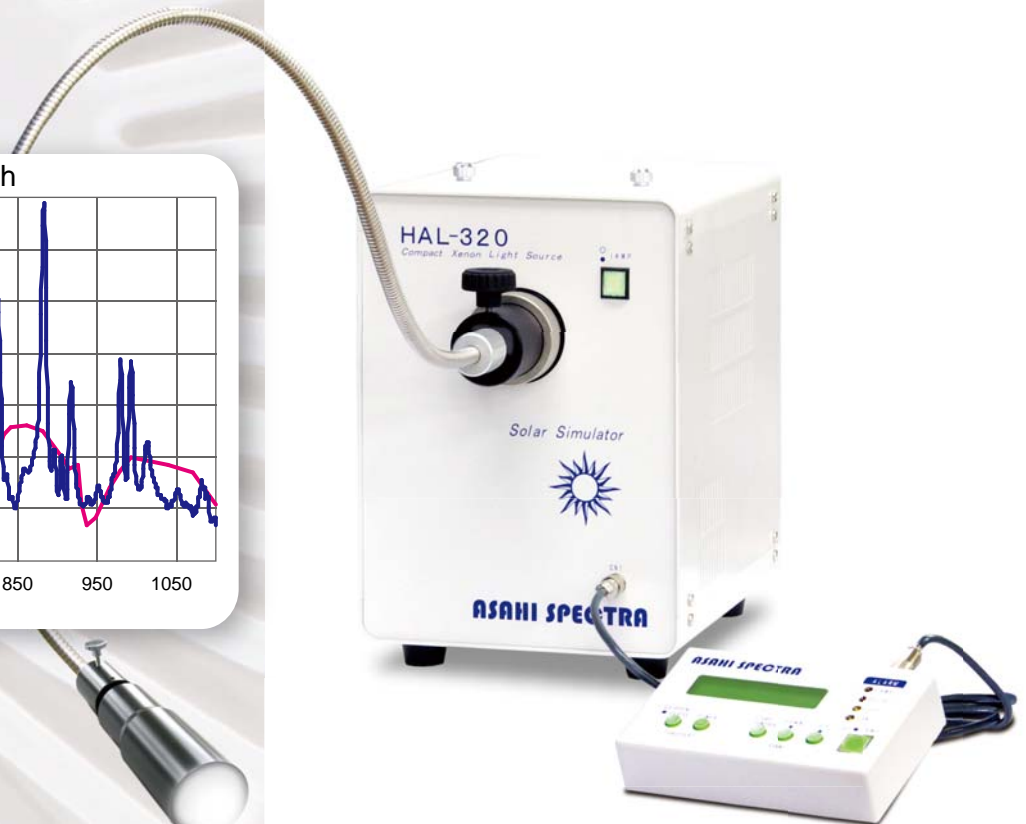
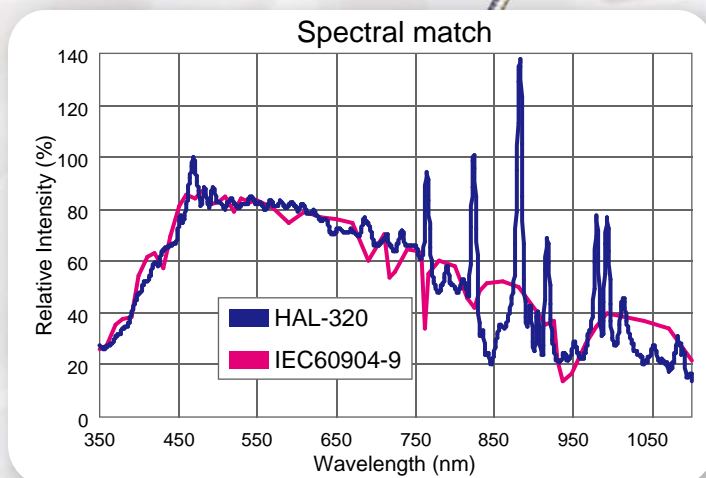


Solar Simulator (400-1100nm)

HAL-320

Compact design and practical fiber illumination system

- Both the lamp and the power supply are in one compact box
- Flexible fiber light guide enables the illumination for any direction
- Embedded variable ND filter enables to control the light intensity continuously (100-30%)
- Spectral match between 800-1100nm also achieves Class A as well as VIS range
- Remotely controllable by the original controller or PC through RS232C
- Reasonable price compared to other conventional solar simulator



Solar Simulator (400-1100nm)

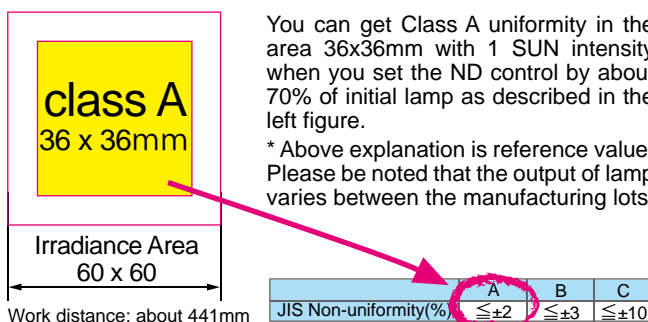
Spectral Matches

Wavelength(nm)	Energy Distribution(%)		Spectral Match	
	HAL-320	JIS		
400- 500	18.0	18.5	97	A
500- 600	20.3	20.1	101	A
600- 700	18.4	18.3	101	A
700- 800	15.7	14.8	106	A
800- 900	12.2	12.2	100	A
900-1100	15.3	16.1	95	A

The combination of xenon lamp and proprietary mirror unit produce the characteristics Class A spectrum. The mirror unit blocks unwanted spectrum up to 3200nm and the emitted output would be ideal solar spectrum without heat.

Nonuniformity

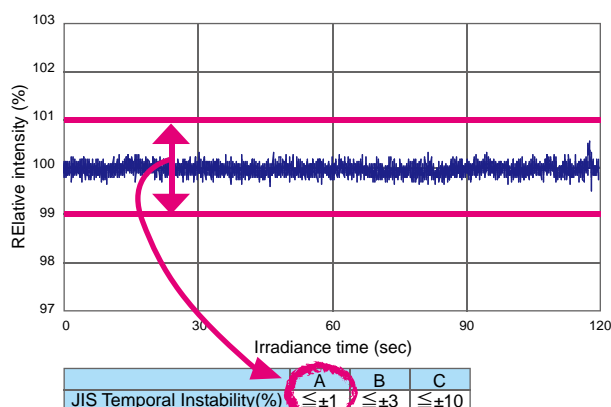
The calculated value of 1SUN in the range from 400 to 1100nm is about 72mW/cm².



You can get Class A uniformity in the area 36x36mm with 1 SUN intensity when you set the ND control by about 70% of initial lamp as described in the left figure.

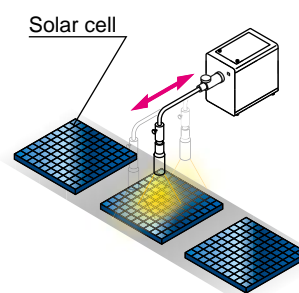
* Above explanation is reference value. Please be noted that the output of lamp varies between the manufacturing lots.

Temporal Instability

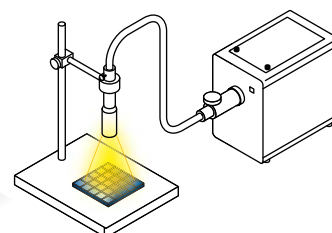


Usage Example

Manufacturing line



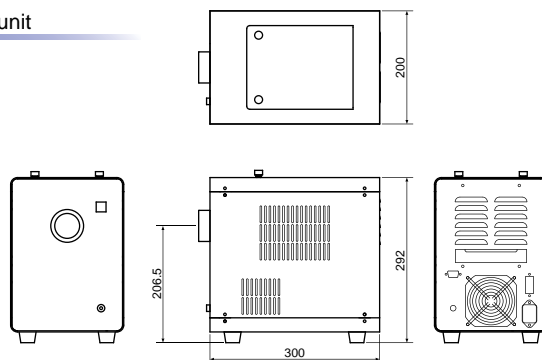
Laboratory



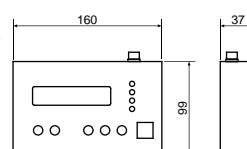
General Specifications

- Model: HAL-320
- Spectral Range: 350 - 1100nm
- Circuit method: Forward converter switching
- Input voltage: AC100-240V 50/60Hz
- Power consumption: less than 540VA at AC240V
- Lamp type: Xenon lamp 300W
- Lamp life: 500h
- Lamp maintenance: Free alignment(Cartridge type)
- Cooling method: Forced cooling
- Shutter: DC solenoid
- Exposure time set: 0.5 - 99999.9sec
- Intensity adjustment: 100 - 30%(Transmittance)
Continuously variable
- Emitting method: Bundled light guide
- Controller: Remote controller (cable length=2m)
- Remote control: RS232C
- Recommended environment: Temperature 10 - 35 deg C
: Humidity 20 - 80%
- Dimensions: Main unit 200(W) x 300(D) x 292(H)mm
: Controller 160(W) x 37(D) x 99(H)mm
- Weight: Main unit 10.2kg
: Controller 0.5kg

Main unit



Controller



Unit: mm

*We accept no responsibility for any errors or omissions, and we reserve the right to modify design, characteristics and products at any time without obligation.

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