# 1 SUN Checker for Solar Simulator

CS-20, CS-30, CS-40

They can monitor 1 SUN illumination of a solar simulator. It enables checking the change of light intensity due to degradation of lamp over time.



#### **Features**

- Quick check of 1 SUN
- Simple digital display
- Battery-operated palm size unit
- · Analog output is available

#### Model

- CS-20 (HAL-320)
- CS-30 (HAL-C100)
- CS-40 (HAL-320W)

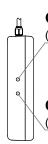
www.asahi-spectra.com

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#### How to set 1 SUN

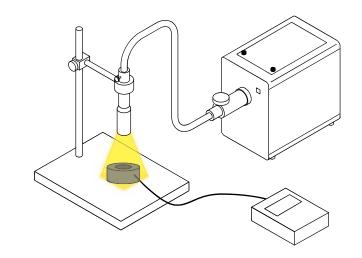
- 1. Shade a sensor head, and set the display value to "0.000" by offset adjustment volume.
- 2. Illuminate with 1 SUN by your solar simulator to the sensor head, (1 sun light intensity has to be confirmed in advance by the user.) and set the display value to "1.000" by gain adjustment volume.
- 3. After the initial settings, you can adjust the light intensity of your solar simulator according to the value of them to keep up 1 sun illumination.\*
  - \*Spectral curve is not considered.





Gain adjustment volume (Adjust the display value to 1.000)

Offset adjustment volume (Adjust the display value to 0.000)

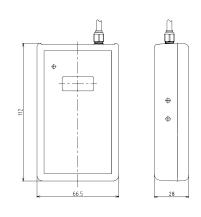


## **Specifications**

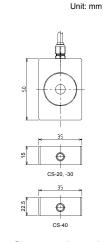
Model	CS-20 (for HAL-320), CS-30 (for HAL-C100), CS-40 (for HAL-320W)	
Display	LCD	Digital 3.5 digit
	Display range *1	0.000 - 1.999 (SUN)
	Over range display	1 (_ is blank)
Sensor head	Detector	Silicon photo diode (for CS-20, -30)
		Silicon photo diode and InGaAs PIN diode (for CS-40)
	M27 thread part	Filter holder mounting position *2
		Usable filter size: 25mm dia. / Thickness: below 6mm
Monitor output	Output range	1mV/digit (Above 2V is not covered under warranty)
	Maximum saturation voltage	Below +5V
	Connected load	More than 100kΩ, less than 500pF
Power source	006P(9V) battery x 1	
Fuse	250mA	
Recommended environment	Temperature	23 deg C ±5 deg C
	Humidity	30 - 80% (Avoid condensation)
Dimensions	Controller	66.5(W) x 112(D) x 28(H)mm
	Sensor head	35(W) x 50(D) x 15(H)mm (for CS-20, -30)
		35(W) x 50(D) x 22.5(H)mm (for CS-40)
Weight		225g (for CS-20, -30), 250g (for CS-40)
Standard accessory	3.5mm dia. mini plug cable	

<sup>\*1</sup> The display value is the relative value for the preset "1.000", which does not guarantee both the spectral irradiance of your solar simulator and any absolute values.

### **Dimensions**







Sensor head

\*Product specifications are subject to change without notice.



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<sup>\*2</sup> Filter holder is optional.