

# CS-2000 Spectroradiometer

## PRODUCT SPECS:

What are the specs for the product?

Model	CS-2000		
Wavelength	380 to 780 nm		
Wavelength	0.9 nm/pixel		
Display wavelength bandwidth	1.0 nm		
Wavelength precision	±0.3 nm (Median wavelength: 435.8 nm, 546.1 nm, 643.8 nm; Hg-Cd lamp)		
Spectral bandwidth	5 nm or less (half bandwidth)		
Measuring angle (selectable)	1°	0.2°	0.1°
Measurement luminance range (Standard light source A)	0.003 to 5,000 cd/m <sup>2</sup>	0.075 to 125,000 cd/m <sup>2</sup>	0.3 to 500,000 cd/m <sup>2</sup>
Minimum measuring area	φ5 mm (φ1 mm when using close-up lens)	φ1 mm (φ0.2 mm when using close-up lens)	φ0.5 mm (φ0.1 mm when using close-up lens)
Minimum measuring distance	350 mm (55 mm when using close-up lens)		
Minimum luminance display	0.00002 cd/m <sup>2</sup>		
Accuracy: Luminance *1(Standard light source A)	±2%		
Accuracy: Chromaticity *1(Standard light source A)	x,y :±0.003 (0.003 to 0.005 cd/m <sup>2</sup> ) x,y :±0.002 (0.005 to 0.05 cd/m <sup>2</sup> ) x :±0.0015 (0.05 cd/m <sup>2</sup> to ) y :±0.001	x,y :±0.003 (0.075 to 0.125 cd/m <sup>2</sup> ) x,y :±0.002 (0.125 to 1.25 cd/m <sup>2</sup> ) x :±0.0015 (1.25 cd/m <sup>2</sup> to ) y :±0.001	x,y :±0.003 (0.3 to 0.5 cd/m <sup>2</sup> ) x,y :±0.002 (0.5 to 5 cd/m <sup>2</sup> ) x :±0.0015 (5 cd/m <sup>2</sup> to ) y :±0.001

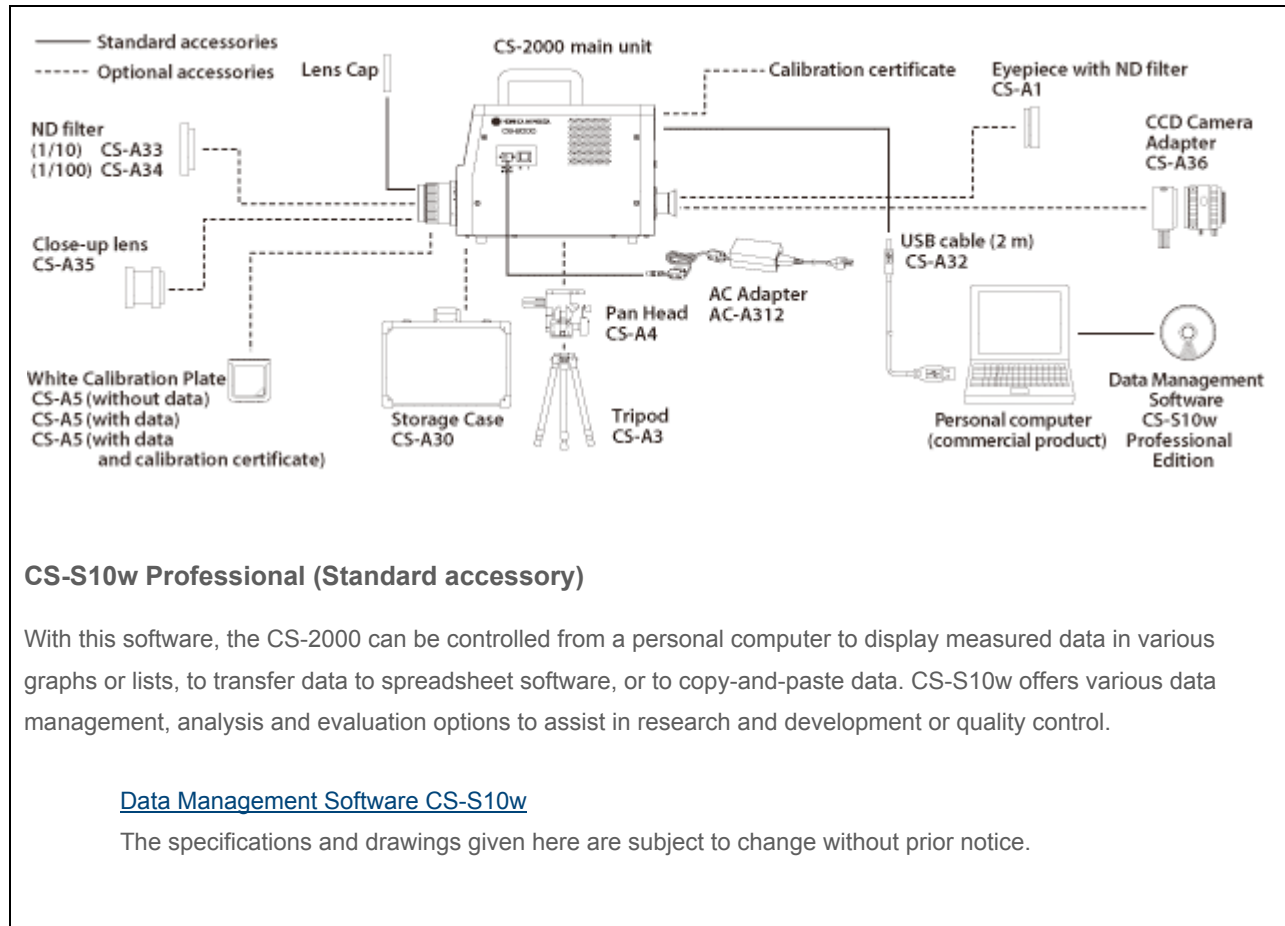
# CS-2000 Spectroradiometer

<b>Repeatability: Luminance(2<math>\sigma</math>)</b> *2	0.4 % (0.003 to 0.05 cd/m <sup>2</sup> ) 0.3 % (0.05 to 0.1 cd/m <sup>2</sup> ) 0.15 % (0.1 to 5,000 cd/m <sup>2</sup> )	0.4 % (0.075 to 1.25 cd/m <sup>2</sup> ) 0.3 % (1.25 to 2.5 cd/m <sup>2</sup> ) 0.15 % (2.5 to 125,000 cd/m <sup>2</sup> )	0.4 % (0.3 to 5cd/m <sup>2</sup> ) 0.3 % (5 to 10cd/m <sup>2</sup> ) 0.15 % (10 to 500,000cd/m <sup>2</sup> )
<b>Repeatability: Chromaticity(2<math>\sigma</math>)</b> *2	0.002 (0.003 to 0.005 cd/m <sup>2</sup> ) 0.001 (0.005 to 0.1 cd/m <sup>2</sup> ) 0.0006 (0.1 to 0.2 cd/m <sup>2</sup> ) 0.0004 (0.2 to 5,000 cd/m <sup>2</sup> )	0.002 (0.075 to 0.125 cd/m <sup>2</sup> ) 0.001 (0.125 to 2.5 cd/m <sup>2</sup> ) 0.0006 (2.5 to 5 cd/m <sup>2</sup> ) 0.0004 (5 to 125,000 cd/m <sup>2</sup> )	0.002 (0.3 to 0.5 cd/m <sup>2</sup> ) 0.001 (0.5 to 10 cd/m <sup>2</sup> ) 0.0006 (10 to 20 cd/m <sup>2</sup> ) 0.0004 (20 to 500,000 cd/m <sup>2</sup> )
<b>Polarization error</b>	2 % or less(400 to 780 nm) : 1°, 3 % or less(400 to 780 nm) : 0.1° 0.2°		
<b>Integration time</b>	Fast: 0.005 to 16 sec.; Normal: 0.005 to 120 sec.		
<b>Measurement time</b>	1 sec. minimum (Manual mode) to 243 sec. maximum (Normal mode)		
<b>Color space mode</b>	Lv x y, Lv u' v', Lv T $\Delta$ uv, XYZ, spectral graph, dominant wavelength, excitation purity		
<b>Interface</b>	USB 1.1		
<b>Operating temperature/ humidity range</b>	5 to 35 °C, relative humidity 80% or less with no condensation		
<b>Storage temperature /humidity range</b>	0 to 35 °C, relative humidity 80% or less with no condensation		
<b>Power</b>	AC adapter (100 to 240V~, 50/60 Hz)		
<b>Current consumption</b>	Approx. 20 W		
<b>Size</b>	158 (W) x 262 (H) x 392 (D) mm		
<b>Weight</b>	6.2 kg		

\*1 Average of 10 measurements in Normal mode at a temperature of 23±2°C and a relative humidity of 65% or less.

\*2 10 measurements in Normal mode at a temperature of 23±2°C and a relative humidity of 65% or less.

# CS-2000 Spectroradiometer



## CS-S10w Professional (Standard accessory)

With this software, the CS-2000 can be controlled from a personal computer to display measured data in various graphs or lists, to transfer data to spreadsheet software, or to copy-and-paste data. CS-S10w offers various data management, analysis and evaluation options to assist in research and development or quality control.

[Data Management Software CS-S10w](#)

The specifications and drawings given here are subject to change without prior notice.