

# WISER I Spectroradiometer

## Technical Specifications

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Reference for spectral measurements UV-VIS-NIR

Operating temperature range -10 to 50°C

Made for outdoor solar research

Robust design no moving parts

NIST Traceable calibration

For solar spectral research, we believe only one measurement concept can be the best. The combination of MS-711 and MS-712, called WISER I is the reference in the market and designed to provide the most accurate solar spectral data outdoors.

The MS-711 and MS-712 spectroradiometer are unique all weather concept spectroradiometers with no moving parts and temperature controlled spectrometers. The MS-712 can be used stand alone, but in combination with the MS-711 it covers the spectral range from 300nm to 1700nm. MS-711 measures in the range from 300nm and 1100nm, and MS-712 covers the near-infrared (NIR) range between 900nm and 1700nm. Both spectroradiometers are accurately calibrated with traceability to the International Standards and issued with a calibration uncertainty budget.

	<b>WISER I</b>
<b>Wavelength range</b>	300 - 1700 nm
<b>Program</b>	Analysis software WSDAc
<b>OS</b>	Microsoft Windows 7/8/9/10
<b>Functions</b>	Display and analyze data
<b>Cable length</b>	10 m
<b>Field of View FOV</b>	180 °

<b>Options</b>	<b>WISER I</b>
<b>Cable length</b>	20 / 30 m

	<b>MS-711</b>
<b>Wavelength range</b>	300 - 1100 nm
<b>Optical resolution FWHM</b>	< 7 nm
<b>Wavelength accuracy</b>	+/- 0.2 nm
<b>Directional response at 1000W/m<sup>2</sup></b>	< 5 %
<b>Temperature response -10°C to 50°C</b>	< 2 %
<b>Temp. control</b>	25 °C
<b>Operating temperature range</b>	-10 - 50 °C
<b>Exposure time</b>	10 - 5000 msec
<b>Dome material</b>	Quartz
<b>Communication</b>	RS-422 / 232C
<b>Power supply</b>	12VDC, 50VA
<b>Dimensions mm</b>	220 (D) x 197 (H)

<b>Weight</b>	4.5 kg
<b>Ingress protection IP</b>	65
<b>Power supply (Power Adapter)</b>	100-240VAC, 50/60Hz
<b>Power consumption</b>	50 W
<b>Power supply operating conditions</b>	-10 to 40°C / 0 to 90 %RH
<b>Power supply dimensions (mm)</b>	320 (W) x 240 (D) x 80 (H)
<b>Power supply weight</b>	1 kg
<b>Program</b>	Analysis software WSDAc
<b>OS</b>	Microsoft Windows 7/8/9/10
<b>Functions</b>	Display and analyze data
<b>Cable length</b>	10 m
<b>Field of View FOV</b>	180 °

<b>Options</b>	<b>MS-711</b>
<b>Cable length</b>	20 / 30 m

	<b>MS-712</b>
<b>Wavelength range</b>	900 - 1700 nm
<b>Optical resolution FWHM</b>	< 7 nm
<b>Wavelength accuracy</b>	+/- 0.2 nm
<b>Directional response at 1000W/m<sup>2</sup></b>	< 7 %
<b>Temperature response -10°C to 50°C</b>	< 5 %
<b>Temp. control</b>	5 °C
<b>Operating temperature range</b>	-10 - 40 °C

<b>Exposure time</b>	10 - 5000 msec
<b>Dome material</b>	BK7
<b>Communication</b>	RS-422 / 232C
<b>Power supply</b>	12VDC, 50VA
<b>Dimensions mm</b>	300 (D) x 200 (H)
<b>Weight</b>	7.5 kg
<b>Ingress protection IP</b>	65
<b>Power supply (Power Adapter)</b>	100-240VAC, 50/60Hz
<b>Power consumption</b>	65 W
<b>Power supply operating conditions</b>	-10 to 40°C / 0 to 90 %RH
<b>Power supply dimensions (mm)</b>	320 (W) x 240 (D) x 180 (H)
<b>Power supply weight</b>	1 kg
<b>Program</b>	Analysis software WSDAc
<b>OS</b>	Microsoft Windows 7/8/9/10
<b>Functions</b>	Display and analyze data
<b>Cable length</b>	10 m
<b>Field of View FOV</b>	180 °

<b>Options</b>	<b>MS-712</b>
<b>Cable length</b>	20 / 30 m

Specifications are subject to change without further notice.