

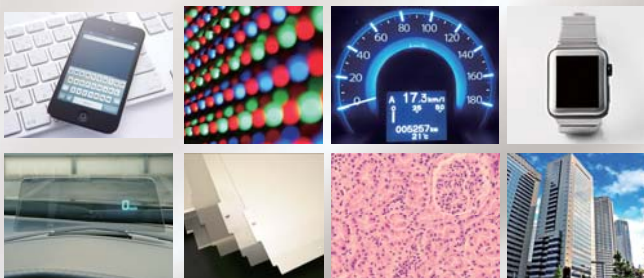
**5 million pixels (2448x2048) with 5 million points spectral data.
High luminance 17 billion cd/m² with built-in ND filter.**

2D Spectroradiometer *SR-5100*

By Non-Destruction and Non-Contact, 2D spectroradiometer instrument that contributes to maintaining high quality of various products as it can evaluate the spectral characteristics of light sources or objects with 5 million pixels, 17 billion cd/m² and 1 nm, 5nm/10nm wavelength pitch.



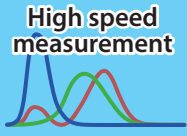
Features |

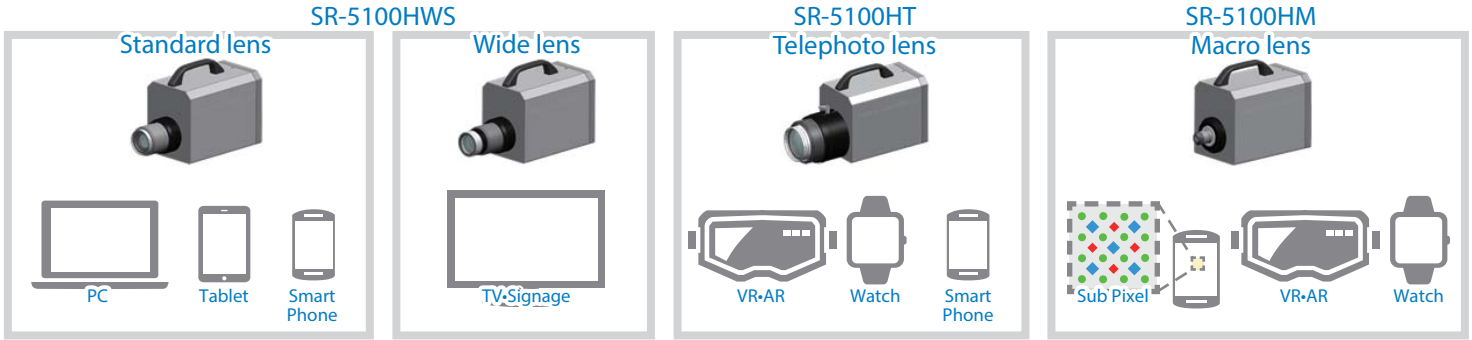
1. High resolution 5 million pixels (2448x2048) spectral measurement and high luminance (17 billion cd/m²).
2. Non-destructive and non-contact, 5 million points of spectral evaluation for the characteristics of light sources, spectral transmittance characteristics of materials, and spectral reflectance characteristics with high accurate 1nm pitch measurement.
3. Microscope system enables to evaluate spectral data for small area with um pixel level. (micro spectroscopy)
4. Imaging spectroradiometer with the same performance as a spot type spectroradiometer.
5. High luminance and chromaticity accuracy is guaranteed by calibration using a light source with traceability.
6. High-precision and high-speed convertible model that takes advantage of 2way measurement methods of spectral and XYZ filters.
7. Application software and SDK included as standard.



Principal use |

- Luminance / chromaticity and spectral evaluation of LCDs, OLEDs, QDs, lasers, micro LEDs and related components
- Emission distribution characteristics and spectral evaluation of automobile meter panels and interior / exterior lighting
- Evaluation of luminance / chromaticity mura and spectral of the light emitting part of LED lighting and OLED lighting
- Spectral evaluation of all objects in the landscape indoors and outdoors
- Spectral evaluation of textile dyed fabrics
- Skin care assessment of skin blemishes and pigmentation
- Analysis of absorption, reflection and transmission characteristics
- Measurement of film and glass coating mura and interference fringes
- Analysis and quantification evaluation of slight differences in the staining status of pathological tissue (SR-5100HM + microscope)

Spectral mode	Hybrid type	XYZ(Filter) mode
<p>High accurate measurement</p> 	<p>Standard feature</p> 	<p>High speed measurement</p> 



Specifications

		SR-5100HWS		SR-5100HT		SR-5100HM		
Measurement mode		Spectral Mode	XYZ(Filter) Mode	Spectral Mode	XYZ(Filter) Mode	Spectral Mode	XYZ(Filter) Mode	
Detector	5 mega pixel CMOS image sensor							
Objective lens		Standard lens / Wide lens *1		Telephoto lens		Macro lens		
	Focal length	f=32mm / f=24mm		f=140mm		-		
Effective pixel	2448x2048							
Measurement range	*2	0.5 - 17,000,000,000cd/m ²	0.005 - 100,000cd/m ²	0.5 - 17,000,000,000cd/m ²	0.005 - 100,000cd/m ²	0.5 - 17,000,000,000cd/m ²	0.005 - 100,000cd/m ²	
Wave length range	*3	380~780nm	-	380~780nm	-	380~780nm	-	
Spectral accuracy	*4	±0.5nm	-	±0.5nm	-	±0.5nm	-	
Spectrum wavelength width	*5	7nm	-	7nm	-	7nm	-	
Wavelength accuracy		1nm	-	1nm	-	1nm	-	
Linearity	Luminance	*3,*6	±2%	±3.5% (≦0.01cd/m ²), ±3% (0.01cd/m ² <)	±2%	±3.5% (≦0.01cd/m ²), ±3% (0.01cd/m ² <)	±2%	±3.5% (≦0.01cd/m ²), ±3% (0.01cd/m ² <)
		Chromaticity	*3,*6	±0.0035 (≦1cd/m ²) ±0.0025 (1cd/m ² <)	±0.0085 (≦0.01cd/m ²) ±0.0050 (≦0.05cd/m ²) ±0.0030 (0.05cd/m ² <)	±0.0035 (≦1cd/m ²) ±0.0030 (1cd/m ² <)	±0.0090 (≦0.01cd/m ²) ±0.0050 (≦0.05cd/m ²) ±0.0030 (0.05cd/m ² <)	±0.0035 (≦1cd/m ²) ±0.0025 (1cd/m ² <)
	*6,*9		±0.005	±0.008	±0.005	±0.008	±0.005	±0.008以内
In-plane uniformity	*10	Luminance: ±2% / Chromaticity: ±0.003						
Interface	USB3.0 / External trigger							
Power supply	AC100 - 240V (50/60Hz) Dedicated AC adapter							
Power consumption	Approx. 20W							
Operation condition	Temperature: 0 to 35°C, Humidity: 80%R.H. or less (No condensation)							
External dimension		W162xH247xD402.4mm *1		W162xH247xD412.5mm		W162xH247xD330.5mm		
Weight		Approx.6.3Kg		Approx.8.2kg		Approx.5.8kg		

*1:Standard lens + Attachment lens, *2:Standard illuminant A, *3:Standard illuminant A, *4:Hg, Hi precision mode, *5:FWHM, Hi precision mode, *6:At the center of sensor, *7 Within 2σ, *8:Max value - Min value, *9:Standard illuminant A + our standard colored glass filters, *10:Center of the sensor, Standard illuminant A, within 80% of field of view.

Measurement area: Standard lens

Measurement distance (mm)	400	500	1,000	1,500	2,000	2,500
Horizontal (mm)	178.0	221.5	435.9	649.7	866.2	1072.5
Vertical (mm)	148.9	185.3	364.7	543.5	724.7	897.2

Measurement area: Wide lens

Measurement distance (mm)	400	500	1,000	1,500	2,000	2,500
Horizontal (mm)	246.6	303.0	587.5	869.9	1155.0	1437.5
Vertical (mm)	206.3	253.5	727.8	727.8	966.2	1202.7

Measurement area: Telephoto lens

Measurement distance (mm)	600	1,000	1,500	2,000	2,500
Horizontal (mm)	60.5	108.6	168.9	229.0	288.7
Vertical (mm)	50.6	90.9	141.3	191.6	241.6

Measurement area: Macro lens

Measurement distance (mm)	6
Horizontal (mm)	6.8
Vertical (mm)	5.7

*Above values are design specifications. Above values may be difference from the values in practice.
*The measurement distance is from tip of objective lens to the measurement target.
*Above values are 80 % area of FOV.

Hardware requirement

OS	Windows [®] 10 Pro (64bit)
CPU	Intel [®] Core(TM) i7-4770 or higher
Memory	16GB or higher
HDD	500GB or higher More than 3GB free space is necessary in the system drive (that is a drive where OS is installed). If full size measurement is executed, data size of its result is about 8GB.
USB port	USB3.0 : 1 port *Please use USB port on the mother board (In case of laptop PC, use USB port on the main body). *Otherwise It may cause malfunction.
USB Host Controller	Intel [®] USB 3.0 eXtensible Host Controller
USB driver	Microsoft Windows [®] 10 USB 3.0 driver *Windows [®] 10 has a native in-box USB 3.0 driver.
Display	1920*1080 or higher, 16.77 million colors (32bit) or higher
Drive	DVD-ROM drive

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*Some screens are simulated.
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*The catalogue includes products that are sold separately.
*The actual color of products may differ slightly from the catalogue due to lighting and printing conditions.

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