

Colour & Appearance Testing



✉ cs@irisanalytical.com

☎ +1 706 760 4500

🌐 www.irisanalytical.com



Reflectance Spectrophotometer IRS-2000 Series offer multi and full illuminates with UV, 8 and 4 mm apertures, and customizable aperture by using a 2° or 10° viewing angle, 2° is used for viewing angles of 1 to 4; whereas 10° is used for viewing angles of more than 4. Reflectance spectrophotometer used d/8° geometry of sphere measurement diffused illumination integrating systems illuminate an object equally from all directions or angles and detects the reflected light at 8°. The applications including plastic, electronic, painting, coating, ink, textile, garment, printing and dyeing, food, medical, cosmetic, industries, research and development, and laboratories. Also, measure reflectance spectrum and another color index precisely and control product quality management correctly. ISO and CIE recommended and equipped with a combined LED light sources with concave grating spectrophotometric mode. The IRS-2000 is used to measure specular component excluded (SCE) or specular component included (SCI) mode.

- Adopt d/8 geometrical optics, recommended by CIE
- Offer durable and low power consumption combined LED light source
- Offer switchable 8mm or 4mm aperture, support both SCI and SCE simultaneously
- Used to the analysis of spectra, and precise data, for color matching and provide exact color transmission
- Build-in high electronic hardware configuration including 3.5-inch TFT touch display
- Build-in concave grating and double arrays image sensor
- Support USB port for data transfer
- Super stain-resistant and stable standard white calibration plate
- Used to store large capacity about 20,000 measurement data
- Measuring 2 standard observer angles, a variety of illuminant, a variety of color indexes, conforms with a variety of standard colorimetric data, meet a variety of customers' demand for color measurement;
- Build-in camera function
- Provide PC software as a standard accessories

Accessories

- Power Adapter
- Built-in Li-ion Battery
- User Guide
- PC Software
- White and Black Calibration Cavity
- Dust Cover

Optional Accessories

- Micro Printer
- Powder Test Box

Applications



Paint



Pigment



Textile



Plastic



Rubber



Cosmetic

Model	IRS-2110	IRS-2120	IRS-2130
Wavelength	400 to 700 nm		
Geometry	Reflect: di:8°, de:8°(diffused illumination, 8-degree viewing angle)		
Display	3.5-inch TFT color LCD, Capacitive Touch Screen		
Measuring Aperture	Single Aperture: 8mm/10mm	Customized Aperture: 8mm/4mm/1x3mm	Dual Aperture: 10mm/8mm & 5mm/4mm
Detector	256 Image Element Double Array CMOS Image Sensor		
Repeatability	MAV/SCI: ?E*?0.06	MAV/SCI: ?E*?0.05	MAV/SCI: ?E*?0.03
Wavelength Interval	10nm		
Illuminant	D65, A, C, D50	D65, A, C, D50, D55, D75, F2, F7, F11	D65, A, C, D50, D55, D75, F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12
Spectrophotometric Mode	Concave Grating		
Index	WI(ASTM E313, CIE/ISO, AATCC, Hunter), YI(ASTM D1925, ASTM 313),TI(ASTM E313, CIE/ISO), Metamerism Index MI, Staining Fastness, Color Fastness, Color Strength, Opacity, 8° Glossiness		
Color Difference	?E*ab, ?E*uv, ?E*94, ?E*cmc(2:1), ?E*cmc(1:1), ?E*00v, ?E		
Color Space	CIE Lab, XYZ, Yxy, LCh, CIE LUV		
Reflectance Range	0-200%		
Light Source	Combined LED sources		Combined LED Light, UV Light
Observer	2°/10°		
Display Data	Spectrogram/Values, Samples Chromaticity Values, Color Difference Values/Graph, PASS/FAIL Result, Color Offset		
Operating Temperature	0 to 40?		
Storage Temperature	-20 to 50?		
Battery	Li-ion battery. 5000 measurements within 8 hours		
Humidity	0 to 85%RH		
Interface	USB	USB, Bluetooth 4.0	
Storage	Standard 2000 Pcs, Sample 20000 Pcs		
Dimensions	184x77x105 mm		
Weight	600g		
Catalogue No.	5801005-04	5801010-04	5801015-04

