

Colour & Appearance Testing



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Iris Color measurement instruments are used mainly for defining the color features of pieces of stuff and other items and imaging input and yield instrument. It is used for different color measurement. It works in different fields to better understanding the Color & Appearance. Basically, Color is used to measure in terms of tristimulus values X, Y, and Z.

The values are handled statistically to produce many color measurements usually being Hunter, CIELAB, and CMC used to this appearing testing, scales usage 3 figures that signified as the letters L, a, b and use a 3D model with the statistically represented as ΔE .

This is used to measure with a colorimeter, Reflectance/ Transmittance Spectrophotometer, Glossmeter, Spectrodensitometer whereas Appearance is the appearance of the items or observed materials through visual attributes for example dimension, appearance, curve, color, surface, shininess, haze, and clearness.

Colorimeter

The Iris Colorimeter offers a radically better-quality potential, with an excellent price for a colorimeter with a measurement precision. Offer correct measurement for sample and allows accurate quality measurements with the additional possibility of color copy on a screen with excellent reliability.



This provides advanced color sample measurement. For different colorimeters, click on our latest Portable Colorimeter series below our first section and simply click the link.

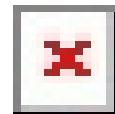
Portable Colorimer

Iris Portable Colorimer has developed the first accurate colorimeter with the measurement aperture up to 4mm, 8mm, and 20mm, which is developed with a reflection of the common techniques and suitable for color examination in all colors testing industries along with the measurement aperture supplies of different materials. Our Colorimer has a promising effect on production observing and quality control. This can be connected to a computer and also controlled either it is connected through the serial interface or by a USB port.



Portable Colorimeter IPC-100 Series

Portable Colorimeter IPC-100 Series used in food, medicine, textile, non-woven fabrics, denim, dyeing and printing, color steel plate, paper, plastic, chemical, coating, ink, building material industries applications. It has a 45/0 °C acceptance angle, and an 8 and 20 mm measurement area for measuring the color of different objects or samples.



The smallest and most portable IPC-100 is the instrument of choice for quality control and manufacturing applications. Low cost, the user interface is displayed prominently; highly satisfy repeatability standard deviation 0.08, in compliance with SCM, CE, and ISO9001. This instrument is ruggedly constructed with high impact stainless steel plates. Offer manifold selection tools to confirm we are measuring the selected portion of the sample.

- Built-in white plate parameters. No need to calibrate each time which can perform measurement quickly.
- Double Locating: Illuminating locating and precise cross locating.
- Switchable Double Measurement End Face: Large stable end face and small concave-convex end face.
- New 45°/0° Optical Path Design: Significantly improve the measurement stability and precision.
- 8mm Measuring Aperture.
- Equipped with the rechargeable high-capacity Li-ion battery. No need to purchase battery repeatedly.
- Configure QCS3 software. Connect PC computers to realize more functions.
- Having got SCM Metrological Certification, CE Certification, and ISO9001 Quality Management System Certification.
- Hand-head structure: small and convenient; make the measurement easier.
- Exquisite appearance: adopts traditional and fashionable aesthetic designs.

Applications

- Food, medicine, textile, non-woven fabrics, denim, dyeing and printing, color steel plate, paper, plastic, chemical, coating, ink, building material industries, etc.

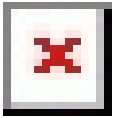
Optional Accessories

- Miniature thermal printer
- PC Software



Portable Colorimeter IPC-200 Series

Portable Colorimeter IPC-200 Series used for high-quality color measurement. Featuring a switchable dual measurement with 4 and 8 mm aperture for industrial color measuring applications including plastic, electronic, paint, ink, textile, garment, printing and dyeing, food, medical, cosmetic, industries, scientific research institutes, schools, and laboratories. It can precisely measure kinds of color indexes in various color spaces and easy to use with powerful functions. The instrument is equipped with high-end color management software that can connect to the PC to achieve more extension functions. The most convenient eco-friendly, low energy consumption instrument, high capacity Lion battery.



- Built-in white plate parameters. No need to calibrate each time that realize rapid measurement.
- Double Locating: Illuminating locating and precise cross locating.
- Switchable Double Measurement End Face: Large stable end face and small concave-convex end face.
- New Integrating Sphere Optical Path Design: Eliminating the stray light of the main optical path and auxiliary optical path. Possessing the highest measurement stability and precision.
- 4mm Measuring Aperture.
- Equipped with the rechargeable high-capacity Li-ion battery. No need to purchase batteries repeatedly.
- Configure CQCS3 software. Connect PC computers to realize more functions.
- Having got SCM Metrological Certification, CE Certification, and ISO9001 Quality Management System Certification.
- Hand-head structure: small and convenient; make the measurement easier.
- Exquisite appearance: adopts traditional and fashionable aesthetic designs.
- Spending huge sums on high-end mold. Product consistency approaches 100%.
- High-cost performance: large output, good quality, cheap products.

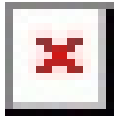
Optional Accessories

- Miniature thermal printer
- PC Software
- Powder test box



Portable Colorimeter IPC-300 Series

Portable Colorimeter IPC-300 Series with black and white calibration, advanced PC software, and d/8° measuring geometry. The corresponding software serial number and password protection are configured in the colorimeter. Suitable for color difference analysis, color difference cumulative analysis, chromaticity index, color sample database management, simulating object color, etc. Illumination locating is a quick, simple, and suitable locating function.



- One-touch access to measurement interface
- Structure design in line with ergonomics
- Easy-to-use operating interface
- The repeatability ΔE is 0.08.
- Portable structure design which is more conducive to keeping the instrument stable when using
- With intellectual property of PC software.
- Be able to perform color difference analysis, color difference cumulative analysis, chromaticity index, color sample database management, simulating object color, etc.
- Li-ion battery and Support USB and RS332 interface

Optional Accessories

- Miniature thermal printer
- PC Software
- Powder test box

Reflectance Spectrophotometer IRS-1000 Series

Reflectance Spectrophotometer IRS-1000 Series 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 the 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 flat grating spectrophotometric mode. The IRS-1000 is used to measure specular component excluded (SCE) or specular component included (SCI) mode.



- Adopt d/ 8° geometric optical structure recommended by CIE
- Build-in combined LED light source with high life and low power consumption
- Provide customized 1 aperture of 8mm or 4mm aperture including flat/ tip measuring aperture can be switched easily, which is suitable for more tested sample)
- The double optical path system, the optical resolution in the visible range is less than 10nm, which can measure the SCI and SCE spectrum of the sample at the same time;
- Provide precise and exact spectrum data for color matching and accurate color transmission
- Build-in high hardware configuration including 3.5-inch TFT touch display, 1000 line blazed grating, silicon photodiode array detector with the large photosensitive area, etc;
- Support USB for data transfer and storage space, which can store more than 30000 pcs of sample data
- Super dirt-resistant and stable standard white calibration board
- Accomplished 2 or 10° standard observer's angle with many light source modes, and many surface color systems to meet many standards of chromaticity indicators, and the needs of various customers for color measurement;
- Build-in camera locating position and stabilizer cross measurement position;
- Offer PC software as standard accessories

Accessories

- Power Adapter,
- Li-ion Battery,
- Operating Instruction
- CD-ROM (containing management software)
- Data Line
- White and Black Calibration Cavity
- Protective Cover and Wrist Strap
- Aperture (8mm or 4mm), 8mm flat aperture, 8mm tip aperture, 4mm flat aperture, 4mm tip aperture

Optional Accessories

- Micro Printer
- Powder Test Box

Model	IRS-1301	IRS-1302	IRS-1303
Wavelength	400 to 700 nm		
Geometry	d/8 (diffused illumination, 8°viewing angle)	Reflect: di:8°, de:8°(diffused illumination, 8°viewing angle);SCI /SCE	Reflect: di:8°, de:8°(diffused illumination, 8°viewing angle)SCI/SCE
Illuminant	D65?A, C, D50?D55?D75?F1?F2(CWF)?F3?F4?F5?F6?F7(DLF)?F8?F9?F10(TPL5)?F11(TL84), F12(TL83/U30)	D65,A,C,D50,F2(CWF),F7(DLF),F10(TPL5),F11(TL84),F12(TL83/U30)	D65,A,C,D50,D55,D75,F1,F2(CWF),F3,F4,F5,F6,F7(DLF),F8,F9,F10(TPL5),F11(TL84),F12(TL83/U30)
Spectrophotometric Mode	-	Flat Grating	
Display	3.5-inch TFT color LCD, Capacitive Touch Screen		
Detector	Silicon photodiode array (double row 40 groups)		
Repeatability	Spectral Reflectance: standard deviation within 0.1 %(400~700nm: within 0.2%) Colorimetric Value: Standard deviation within 7E*ab 0.04 (Measurement conditions: white calibration plate measured 30 times at 5 seconds intervals after white calibration)	Spectral reflectance: MAV/SCI, Standard deviation within 0.1% (400 nm to 700 nm: within 0.2%) Chromaticity value: MAV/SCI, within 7E*ab 0.04 (When a white calibration plate is measured 30 times at 5 second intervals after white calibration)	Spectral reflectance: MAV/SCI, Standard deviation within 0.08% (400 nm to 700 nm: within 0.18%) Chromaticity value: MAV/SCI, within 7E*ab 0.02 (When a white calibration plate is measured 30 times at 5 second intervals after white calibration)
Wavelength Interval	10nm		
Display Data	Spectrogram/Values, Samples Chromaticity Values, Color Difference Values/Graph, PASS/FAIL Result, Color Offset		Spectral Value/Graph, Colorimetric Value, Color Difference Value/Graph, PASS/FAIL Result, Color Offset, Color Simulation, color index setting(7E*94, 7E*cmc, 7E2000), tolerance prompt, reverse prompt, time setting, language setting, restore factory setting
Operating Temperature		0 to 40?	
Storage Temperature	-20 to 50?		
Source	Combined LED sources	LED light source	
Index	WI(ASTM E313?CIE/ISO,AATCC), YI(ASTM, D1925?ASTM 313),TI(ASTM E313?CIE/ISO), Metamerism Index (Mt), Strength, Color Stain, Color Fastness	WI(ASTM E313?CIE/ISO,AATCC, YI(ASTM D1925?ASTM 313), Staining Fastness, Color Fastness, Color Strength, Opacity, 8° Glossiness,	WI(ASTM E313?CIE/ISO,AATCC), YI(ASTM, D1925?ASTM 313), Metamerism Index MI, Staining Fastness, Color Fastness, Color Strength, Opacity, 8° Glossiness
Color Difference	7E*ab,7E*uv,7E*94,7E*cmc(2:1),7E*cmc(1:1),7E*cmc(l:c),CIE2000?E*00?7E(h)	7E*ab,7E*uv,7E*94,7E*cmc(2:1),7E*cmc(1:1),7E*00	7E*ab,7E*uv,7E*94,7E*cmc(2:1),7E*cmc(1:1),7E*00, DIN?E99,7E(Hunter)
Color Space	CIE LAB,XYZ,Yxy,LCh,CIE LUV,s-RGB,7xy,Munsell(C/2)		
Reflectance Range	0-200%		
Observer	2°/10°		
Battery	Li-ion battery. 2800 times within 8 hours.	3.7V,5000mAh Li-ion battery, 6000 measurements within 8 hours	3.7V,5000mAh Li-ion battery, 6000 measurements within 8 hours
Humidity	0 to 85%RH		
Interface	USB/RS-232	USB	USB, Bluetooth 4.2
Storage	1000 Standards, 15000 Samples	Standard 1000 Pcs, Sample 20000 Pcs	Standard 1000 Pcs, Sample 30000 Pcs
Dimensions	90x77x230mm	129X76X217mm	
Weight	Approx 600g		
Catalogue No.	5800505-04	5800510-04	5800515-04

Reflectance Spectrophotometer IRS-2000 Series

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

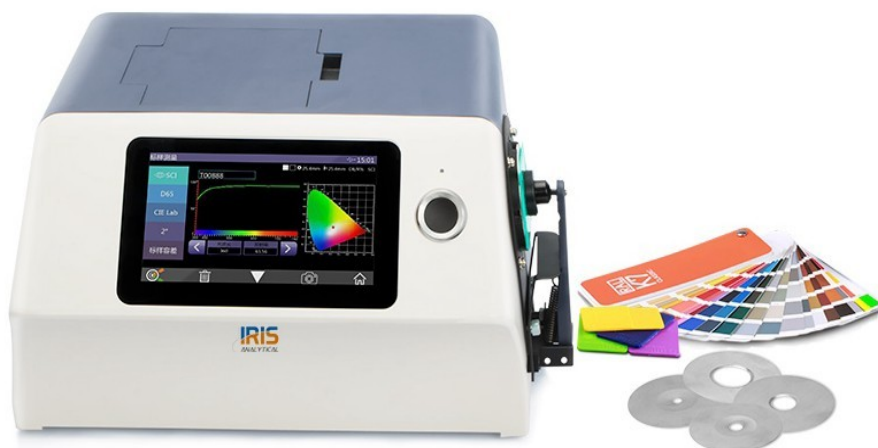


Cosmetic

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/1×3mm	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	184×77×105 mm		
Weight	600g		
Catalogue No.	5801005-04	5801010-04	5801015-04

Reflectance/Transmittance Spectrophotometer IRTS-2000 Series

Reflectance/Transmittance Spectrophotometer IRTS-2000 Series design with holographic grating (concave grating) that delivers high diffraction efficiency, low stray light. It allows the generation of asymmetric and symmetric groove profiles. A new 360-780 nm wavelength for the color analysis and transmission in laboratories, industries, such as plastics, electronics, paint and ink, printing, garments, leather, paper, auto, medical, cosmetics, food, research institutes. Compatible with both full illuminates, reflective d/8, and transmissive d/0 geometry.



Build-in high configuration of hardware including 7 inches TFT Color touch display
 A new concave grating for high diffraction efficiency, low stray light
 With dual-array image sensor LED, UV LED
 Suitable for reflective and transmissive spectrum, for an exact and accurate result,
 Different aperture are fixed for different function: auto identify measuring aperture, switchable between 4 measuring apertures: 25.4 mm/15 mm/8 mm/4 mm. along with customizing apertures as per user need
 Built-in temperature sensor to monitor and compensate the measuring temperature to ensure the measurement more precision.
 Wavelength range 360 to 780 nm
 Built-in 400nm cut off/460nm cut off (only xenon lamp edition), more professional in UV measurement.
 Independent light source-detector continuously monitors the condition of light sources to ensure the light source reliable.
 Provide multiple measurement modes including quality management mode, sample mode
 Used to store large data files up to 20000 pieces test result
 Built-in camera locating
 More powerful extended functions at the PC software.

Accessories

- Power Adapter
- User Guide
- CD Disk(PC Software)
- USB cable
- Standard Calibration Board
- Black Calibration Cavity
- Transmission black baffle
- Sample holder
- 25.4 caliber, 8 calibers, 4 caliber
- Transmissive Test Component

Optional Accessories

- Micro-printer
- Transmissive Test Component
- Micro Aperture(4mm) transmission test clamp component
- Instrument inversion components

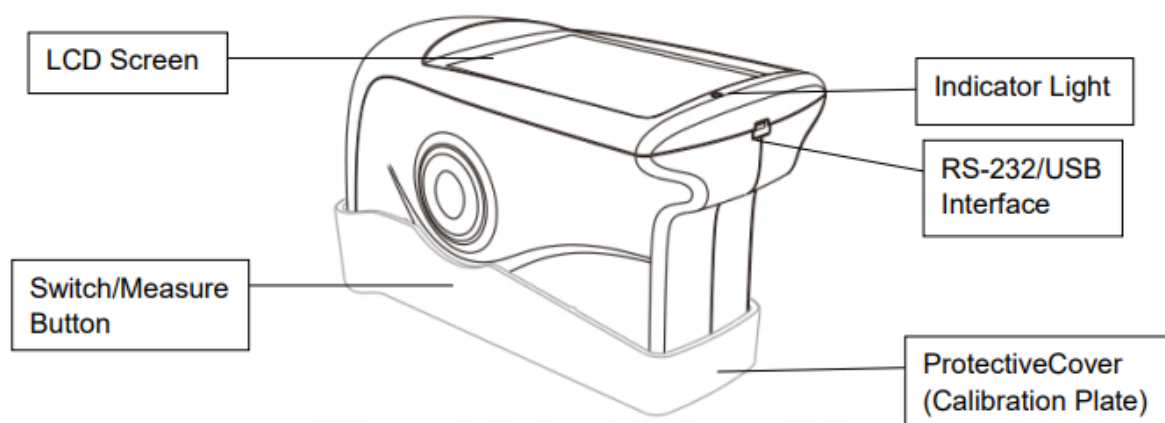
Model	IRTS-2300		IRTS-2400	IRT2500	IRTS-2100	IRTS-2200
Wavelength	360 to 780 nm					
Geometry	Reflect: di:8°, de:8 Transmittance: di:0°, de:0					
Display	7-inch TFT color LCD, Capacitive Touch Screen					
Measuring Aperture	Reflective : 30mm/25.4mm, 10mm/8mm, 6mm/4mm; Transmissive : 30mm/25mm;					
Function	Automatic identification of switch caliber, Customized Configuration caliber and lens position					
Detector	256 Image Element Double Array CMOS Image Sensor					
Repeatability	Spectral reflectance: 25.4mm/SCI, Standard deviation within 0.06% (400 nm to 700 nm: within 0.05%); Chromaticity value:25.4mm/SCI, Standard deviation within ?E*ab 0.01 Spectral Transmittance: 25.4mm/SCI, Standard deviation within 0.06% (400 nm to 700 nm: within 0.06%); Chromaticity value:25.4mm/SCI, Standard deviation within ?E*ab 0.015	Spectral reflectance: 25.4mm/SCI, Standard deviation within 0.07% (400 nm to 700 nm: within 0.06%) Chromaticity value: 25.4mm/SCI, Standard deviation within ?E*ab 0.015 Spectral Transmittance: 25.4mm/SCI, Standard deviation within 0.07% (400 nm to 700 nm: within 0.07%) Chromaticity value: 25.4mm/SCI, Standard deviation within ?E*ab 0.018		Spectral reflectance: 25.4mm/SCI, Standard deviation within 0.05% (400 nm to 700 nm: within 0.04%) Chromaticity value:25.4mm/SCI, Standard deviation within ?E*ab 0.02 Spectral Transmittance: 25.4mm/SCI, Standard deviation within 0.05% (400 nm to 700 nm: within 0.04%) Chromaticity value:25.4mm/SCI, Standard deviation within ?E*ab 0.03	Spectral reflectance: 25.4mm/SCI, Standard deviation within 0.04% (400 nm to 700 nm: within 0.04%) Chromaticity value:25.4mm/SCI, Standard deviation within ?E*ab 0.01 Spectral Transmittance: 25.4mm/SCI, Standard deviation within 0.05% (400 nm to 700 nm: within 0.04%) Chromaticity value:25.4mm/SCI, Standard deviation within ?E*ab 0.02	
Wavelength Interval	10nm					
Illuminant	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,YI (ASTM D1925, ASTM 313), TI (ASTM E313, CIE/ISO), MI (Metamerism Index), Staining Fastness, Color Fastness, Color Strength, Opacity, 8° Glossiness,Gardner Index, Pt-Co Index, 555 Index, Haze(ASTM D1003)					
Color Difference	?E*ab,?E*uv,?E*94,?E*cmc(2:1),?E*cmc(1:1),?E*00, DIN?E99,?E	?E*ab, ?E*uv, ?E*94, ?E*cmc(2:1), ?E*cmc(1:1), ?E*00v, ?E(Hunter), DIN ?E99		?E * ab ,?E * uv ,?E * 94 ,?E * cmc(2:1) ,?E * cmc(1:1) ,?E * 00 , DIN?E 99 ,?E		
Reflectance Range	0-200%					
Light Source	360 nm to 780 nm, Combined LED Light, 400nm cut-off light source					
Observer	2° & 10°				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?					
Humidity	0 to 85%RH					
Interface	USB & Print serial port					USB & Bluetooth & Print port
Storage	Standard 1000 Pcs, Sample 20000 Pcs	Standard 2000 Pcs, Sample 20000 Pcs	Standard 2000 Pcs, Sample 20000 Pcs	Standard 2000 Pcs, Sample 20000 Pcs	Standard 5000 Pcs, Sample 40000 Pcs	
Dimensions	370x300x200mm					
Weight	Approx. 9.6kg					
Electrical Requirement	AC 24V, 3A Power adapter power supply		DC 24V, 3A Power Adapter		AC 24V, 3A Power adapter power supply	
Catalogue No.	5803005-04		5803010-04	5803015-04	5803020-04	5803025-04

Glossmeter

Iris Gloss Meter used to measure specular reflection gloss of a surface for testing of paints, coating, plastics, ink, rubber, printing, paper, glass, hardware, ceramic, marbles. Convenient features including Li-ion battery, USB/RS-232, protective cover. The function can be selected according to user need. There are many functions that are important in selecting gloss meters such as high accuracy, excellent measurement modes, and USB or pc connector.



We provide highest accuracy, ease-of-use, and multiple functional gloss meters that are crucial for currently analysis of testing requirement. The gloss of a surface can be significantly inclined by different features, such as the softness accomplished during polishing, the amount and type of coating use and the enhance products quality. We design our products to gain maximum request or demand in market.



Selection of measurement angle:

The angle is selected based on the gloss range shown in below:

Gloss Range	60° Value	Notes
High Gloss	>70 GU	If the measurement exceeds 70 GU, change test setup to 20°
Medium Gloss	10 - 70 GU	-
Low Gloss	<10 GU	If the measurement is less than 10 GU, change test setup to 85°

Digital Gloss Meter IGM-2000 series

Digital Gloss Meter IGM-2000 series is a semi-gloss meter suitable for the glossiness measurement of architectural material gloss coatings, plastics, used to reflect images less distinctly and reduced intensity, light is scattered producing the reflected image to seem diffused. Design with three models. The 2 models with 60° and the other model have 20°/60°/85°. The 60° measuring angle can be used for any surface, from dull to shiny. To accomplish good gloss measurements on high gloss surfaces the 20° angle is offered, whereas for low gloss surfaces the 85° angle is best. The Digital Gloss Meter is a single measurement mode: Basic mode with storage capacity up to 1000. Ergonomics designed, small, lightweight, and robust. Certify by international standard ISO 2813, GB/T 9754, ASTM D 523, ASTM D 2457.



- With 3 measurement angle 20°/60°/85° to cover the coating application, Semi-gloss
- Concise appearance, feel good
- Display 3 sets of measurement data, good for comparison
- Built-in lithium-ion rechargeable battery
- Basic model measurement can meet basic glossiness testing requirements
- One button for all angles measurement at the same location
- Comply with international standards
- Stable performance, easy to read data

Accessories

- Power Adapter
- User manual,
- Calibration plate
- QC software
- USB cable

Optional Accessories

- Miniature printer

Model	IGM-2060	IGM-2060L	IGM-2080T
Measuring Angle	60°		20°/60°/85°
Range	0 to 200GU	0 to 300GU	20°:0 to 1000GU 60°:0 to 1000GU 85°?0 to 160GU
Resolution	1GU	0.1GU	
Measuring Mode	Basic mode		
Repeatability	±1GU	± 0.1GU/ ± 0.2GU/ ± 0.2%GU	
Calibration	Manual		
Display	3.5 inch TFT		
Operating Temperature	0 to 40?		
Storing Temperature	-20 to 50?		
Interface	USB/RS-232		
Batteries	3.7V,3200mAh Li-ion Battery		
Certifications	ISO 2813, GB/T 9754, ASTM D 523, ASTM D 2457		
Dimension	160x75x90mm		
Weight	3.5 kg		
Catalogue No.	3101005-04	3101010-04	3101015-04

Gloss Meter IGM-1000 Series

Gloss Meter IGM-1000 Series measures gloss units (GU) in manufacturing industries of painted, coated and shiny surfaces with single, and TRIO angle measurements typically 20° 60° and 85° reflective angles. The Gloss Meter has four measurement modes: Basic mode; Statistic mode; Continuous mode; QC mode. Certify by international standard ISO2813, ASTM523, GB/T9754. Compatible with the standards accessories user manual, calibration plate, QC software, and USB cable. Auto-calibration function



The function of different modes:

1. **Basic mode:** For a single measurement. The outcomes will be saved automatically. Data used as the standard in Statistic Mode. It can display 5 sets test data simultaneously.
2. **Statistic mode:** For multi measurement of sample.
3. **Continuous mode:** For measuring large area samples and evaluate the homogeneity of large-area samples.
4. **QC mode:** for quality analysis of the sample.

v 20° = high gloss coatings, plastics, brightened metal and similar materials

v 60° = medium (semi) gloss coatings, plastics, brightened metal and similar materials

v 85° = low gloss coatings, plastics, brightened metal and similar materials

- The four measurement mode: Basic mode; Statistic mode; Continuous mode; QC mode
- With 3 measurement angle 20°/60°/85° to cover the coating application
- Elegant Design combined with aesthetics and ergonomics
- With auto-calibration function
- Meet the second-grade requirements of JJG696
- Auto Power-off within optional 30-120 seconds
- Comply to ISO2813, ASTM523, GB/T9754
- Large storage to save over 35000 data

Accessories

- User manual
- Calibration plate
- QC software
- USB cable

Optional Accessories

- Miniature printer

Model	IGM-1060	IGM-1060L	IGM-1080T
Measuring Angle	60°		20° /60°/85°
Range	0 to 200 GU	0 to 1000 GU	20°: 0 to 2000 GU 60°: 0 to 1000 GU 85°: 0 to 160 GU
Resolution	1 GU	0.1GU	0.1GU
Measuring Mode	Basic	Basic mode; Statistic mode; Continuous mode; QC mode	
Repeatability	0 to 100 GU : ±0.5GU 100 to 2000 GU : ±0.5%GU	0 to 100GU : ±0.2 GU 100 to 2000 GU : ±0.2% GU	0 to 100GU : ±0.2GU; 100~2000GU : ±0.2%GU
Calibration	Auto-calibration		
Display	2.3 inch white and black screen		
Operating Temperature	0 to 40°		
Storing Temperature	-20 to 50°		
Interface	USB	USB	USB & Bluetooth 2.1 version
Batteries	1pc dry-cell battery		
Certifications	ISO2813,ASTM523, GB/T9754		
Dimension	160x52x84 mm		
Weight	~3 kg		
Catalogue No.	3100505-04	3100510-04	3100515-04

Low Gloss Meter IGM-3000 Series

Low Gloss Meter IGM-3000 Series build with touch screen display, easy to use, and easy to measure gloss of surfaces of materials, portable, and has a built-in lithium rechargeable battery. The low gloss meter is equipped with four measurement modes: basic measurement, statistical measurement, continuous measurement, QC measurement. It has 3 angles and measures the low gloss and semi-gloss simultaneously. Certify by international standard ISO 2813, GB/T 9754, ASTM D 523, ASTM D 2457.



The function of different modes:

1. **Basic mode:** For a single measurement. The outcomes will be saved automatically. Data used as the standard in Statistic Mode. It can display 5 sets test data simultaneously.
2. **Statistic mode:** For multi measurement of the sample.
3. **Continuous mode:** For measuring large area samples and evaluate the homogeneity of large-area samples.
4. **QC mode:** for quality analysis of the sample.

v 20° = high gloss coatings, plastics, brightened metal, and similar materials

v 60° = medium (semi) gloss coatings, plastics, brightened metal and similar materials

v 85° = low gloss coatings, plastics, brightened metal and similar mater

- With 3 measurement angle 20°/60°/85° to cover the coating application, semi-gloss
- Display 5 sets of measurement data, good for comparison
- Measuring mode: basic measurement, statistical measurement, continuous measurement, QC measurement (only for GQC6 software).
- Continuous mode to check uniformity over large areas
- Connect to PC, more extend functions
- Input gloss value manually
- Large touch screen operation, easy to use
- Beauty appearance, good man-machine communication interface
- Powerful functions to meet many different requirements
- Large storage to save over 5000 data
- Built-in lithium-ion rechargeable battery.

Accessories

- Power Adapter
- User manual,
- Calibration plate
- QC software
- USB cable

Optional Accessories

- Miniature printer

Model	IGM-3060	IGM-3060L	IGM-3080T
Measuring Angle	60°		20°/60°/85°
Range	0 to 1000GU	0 to 1000GU	20°: 0 to 2000GU 60°: 0 to 1000GU 85°: 0 to 160GU
Resolution	0.1GU		
Measuring Mode	Basic mode: 1000, Statistical Mode: 5000, Continuous mode : 5000		
Repeatability	$\pm 0.1GU/\pm 0.2GU/\pm 0.2\%GU$		
Calibration	Manual		
Display	3.5-inch TFT		
Operating Temperature	0 to 40°		
Storing Temperature	-20 to 50°		
Interface	USB/RS-232		
Batteries	3.7V,3200mAh Li-ion Battery		
Certifications	ISO 2813, GB/T 9754, ASTM D 523, ASTM D 2457		
Dimension	160x75x90 mm		
Weight	3.5 kg		
Catalogue No.	3101505-04	3101510-04	3101515-04

Spectrodensitometer

Iris Spectrodensitometer measures spectral wavelengths and gets density readings. This instrument can provide readings that help to view all the light that the human eye can see, so there are many applications for human perception such as in ink printing, film processing, textile printing, and dyeing, plastic electronics, and other industries for color measurement and quality control; especially suitable for the measurement and quality control of optical density and dot enlargement in ink printing industries. This works by aiming at a light source designed at a photoelectric cell.



Spectrodensitometer ISD-100

Spectrodensitometer ISD-100 measures the density of a sample which is only a measure of the absorbance of ink, film processing, and textile and dyeing printing at 400 to 700 nm wavelengths range of light. It is a compact, portable, and cost-effective device. We offer global standards for 45/0 geometry of a transmission densitometer, including the transmission of the light source, allowing accurate measurement.



Spectrodensitometer is used for color measurement and quality control, especially suitable for the measurement and quality control of optical density and dot enlargement in ink printing. Accomplished measuring densities within 0.01 D. Customize 2 mm, 4 mm, and 8 mm single aperture, can measure observer at 2°/10° and offer temperature control to one of the widest in the industry giving you the correct temperature for your measurement application.

- Easy-to-read LED Light, UV Light for efficient operation
- Customize 2 mm, 4 mm, 8 mm single aperture
- Applications: ink printing, in film processing, textile printing and dyeing, plastic electronics and other industries for color measurement and quality control; especially suitable for the measurement and quality control of optical density and dot enlargement in ink printing
- Wide density range accurate film density measurements up to 0.01 D
- USB data for large storage and analysis, and micro printer for hard copy

Accessories

- Power Adapter
- USB Cable
- Built-in Li-ion battery
- User Manual
- Software(download from the website)
- White and Black Calibration Board,
- Protective Cover
- Polarization filter box
- Locating Plate

Optional Accessories

- Micro Printer

Model	ISD-110	ISD-120
Wavelength Range	400 to 700 nm	
Geometry	45/0	
Light Source	Combined LED Light, UV Light	
Spectral Separation Device	Concave Grating	
Detector	256 Image Element Double Array CMOS Image Sensor	
Half Bandwidth	10 nm	
Density index	Density value, density difference, dot area, dot enlargement, overprint, printing characteristics, printing contrast, tone error and gray level	
Observer	2°/10°	
Repeatability	0.01 D	
Measurement Mode	Single Measurement, Average Measurement	
Display	3.5-inch TFT color LCD	
Storage Temperature	0 to 40°	
Operating Temperature	-20 to 50°	
Storage	10000 pcs	20000 pcs
Interface	USB	
Certifications	ISO, CIE	
Batteries	Li-ion battery	
Dimension	184x77x105 mm	
Weight	600 g	
Electrical Requirement		
Catalogue No.	1502005-04	1502010-04

