









Spectral Colorimeter



CS-280/280+/286/288

Product Advantages

-  Auto Light Compensation
-  Optical Engine
-  Every Test Calibration
-  Full-band Balanced Light Source

-  Measure Absolute Color Value
-  Spectrum Measurement Principle Achieve High Accuracy
-  Patented Technology Guarantees Repeatability
-  Mass Storage Memory



Application Examples



▲ Plastic



▲ Paint



▲ Printing



▲ Food

Technical Data

Type	CS-280	CS-280+	CS-286	CS-288
Illumination/Viewing System	di/8(diffused illumination: 8°viewing),SCI (conform to CIE No.15,ISO 7724/1,ASTM E1164,DIN 5033 Teil7,JIS Z8722 Condition c standard)			
Integrating Sphere Size	Φ40mm,Avian-diffused reflection surface coating			
Light source	CLED			
Sensor	Array Sensor			
Wavelength Range	400-700nm			
Spectral Resolution	10nm			
Measurement Time	2s			
Measurement Aperture	11mm,optional 4mm, 6mm, 15mm			
Repeatability	Standard Deviation ΔE^*ab 0.08(When a white calibration plate is measured 30 x at 10-second intervals after white calibration)			
Observer	2° and 10°			
Illuminants	A,C,D50,D65		A,C,D50,D55,D65,D75,F1~F12,CWF,U30,DLF,NBF,TL83,TL84,U35	
Display			with camera	with camera,spectrum reflectance value,manually input target value
Color Differences	$\Delta E^*ab,\Delta E^*CH$		$\Delta E^*ab,\Delta E^*CH, \Delta E^*uv,\Delta E^*cmc(2:1), \Delta E^*cmc(1:1), \Delta E^*94, \Delta E^*00$	
Color Spaces	CIE-L*a*b,L*C*h	CIE-L*a*b,L*C*h,XYZ,Yxy	CIE-L*a*b*,L*C*h,L*u*v,XYZ,Yxy,Reflectance	
Other Index	Staining Fastness, Color Fastness	WI(ASTM E313 -10,ASTM E313 -73,CIE/ISO,AATCC,Hunter,Taube Berger,Ganz,Stensby) YI(ASTM D1925,ASTM E313 -00,ASTM E313 -73)Tint(CIE,ASTM E313,Ganz),staining fastness,color fastness		metameric index Milm
Data Storage	20000 pcs of samples			
Light Source Lifetime	5 years,1.5 million			
Other	without	camera,electricity pantone color chart	camera,electricity pantone color chart,Mobile Phone APP	
Display	Panchromatic true color screen			
Language	Chinese and English			
Interface	USB2.0			
Working Temperature	5~45°C relative humidity 80% or less(at 35°C) with no condensation			
Storage Temperature	-25°C to 55°C,relative humidity 80% or less (at 35°C) with no condensation			
Power	Rechargeable Lithium Battery 8.4V/2000mAh,adaptor DC12V			
Size	77×86×210mm			
Weight	about 550g			
Standard Accessories	Power Adapter,Operating Manual,Color QC Software,Driving Software,USB Cable,Calibration Tiles (Black and White), Protection Cover,Canvas bag			
Optional Color Matching System	Micro Printer			
UV Light Source	not support			
	without			