

Non-contact / Online Color Sensor



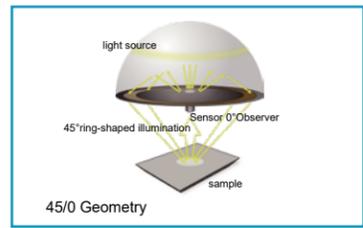
CRX-50/51/52

Product Features

- Built-in Calibration Tiles for Auto Calibration
- Full Wavelength Balanced LED Light Source with Long Lifetime

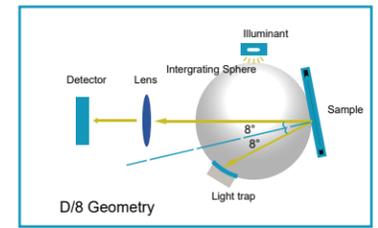
CRX-50

- 45/0 Geometry for Color Measurement
- Non-Contact and Instrument to Sample Distance 7.5mm
- Ultra Fast Measurement with Interval Only 20ms
- Measure with High Accuracy for Samples with Fluctuation $\pm 3\text{mm}$



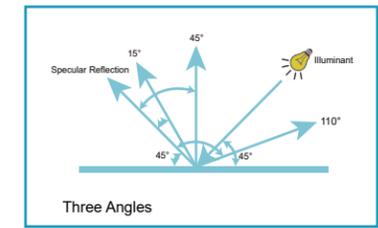
CRX-51

- D/8 Geometry for Color Measurement
- IP67 Protection Level, No Need Maintenance, Best Choice for Anodizing Products Color Test
- Non-Contact and Instrument to Sample Distance 0.5mm
- Good Consistency with Laboratory Test Result
- Ultra Fast Measurement with Interval Only 20ms

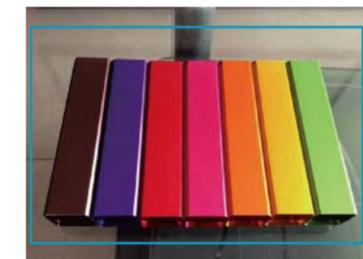


CRX-52

- Three Angles to Measure Color, Graininess and Grade Evaluation
- Measure Angles 15, 45 and 115, Illuminate angle 45
- Good Consistency with Laboratory Test Result
- It is designed to measure car paint, effective paint, laser paper, mobile phone colorful shell, etc.



Application



▲ Anodizing Products



▲ Paint Coating



▲ Paper Production Line



▲ Automobile Spraying Line



▲ Textile Production Line



▲ Wood Production Line

Technical Data

Type	CRX-50	CRX-51	CRX-52	Measurement Interval	2S
Illumination / Viewing System	45/0, (Illumination, 0° Viewing)	D/8 (Diffused Illumination, 0° Viewing)-SCI (specular component included)	45° illumination, 15°, 45°, 110° Viewing	Repeatability	Chromaticity Value: ΔE^*ab standard deviation ≤ 0.03 , Max. ≤ 0.05 (a white calibration tile is measured 30 times at 1-second intervals after white calibration)
Light Sources	CLEDS (Full Wavelength Balanced LED Light Source)			Color Space and Other Indices	CIE-L*a*b, L*C*h, L*u*v, XYZ, Yxy, Reflectance, WI (ASTM E313-00, ASTM E313-73, CIE/ISO, AATCC, Hunter, Taube Berger Stensby), YI (ASTM D1925, ASTM E313-00, ASTM E313-73), Tint (ASTM E313, CIE, Ganz), Milm, Metamerism Index Milm, Staining Fastness, Color Fastness
Sensor	Dual Light Path Sensor Array		Silicon Photodiode		
Measurement Distance	7.5±3mm (Repeatability in the case of Distance Fluctuations $dE < 0.1$)	0.5mm	Contact to Measure	Color Difference	$\Delta E^*ab, \Delta E^*CH, \Delta E^*uv, \Delta E^*cmc(2:1), \Delta E^*cmc(1:1), \Delta E^*94, \Delta E^*00$
Calibration Method	Build-in Calibration Tiles			Light Source Lifetime	Whole Life Time Warranty
Protection Level	Without	IP67	Without	Working Temperature	0-45°C, relative humidity 80% or below (at 35°C), no condensation
Wavelength Range	400-700nm			Storage Environment	-25-55°C, relative humidity 80% or below (at 35°C), no condensation
Wavelength Interval	10nm			Power Adaptor	DC12V
Half Band Width	5nm			Interface	USB or custom made
Reflectance Range	0-200%			Power	12V DC Power Adaptor
Measurement Aperture	$\phi 7\text{mm}$	$\phi 10\text{mm}(\phi 4\text{mm optional})$	$\phi 7\text{mm}$		
Measurement Distance	7.5mm				
Illuminants	A, C, D50, D55, D65, D75, F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12, CWF, U30, DLF, NBF, TL83, TL84, U35				
Measurement Time	Min. 20ms	Min. 20ms	6s		
Inter Instrument Agreement	ΔE^*ab within 0.2 (BCRA Series II, average measurement of 12 tiles)		ΔE^*ab within 0.5 (BCRA Series II, average measurement of 12 tiles)		