

## Non-contact / Online Color Sensor



## Application



▲ Anodizing Products



▲ Paint Coating



▲ Paper Production Line



▲ Automobile Spraying Line



▲ Textile Production Line



▲ Wood Production Line

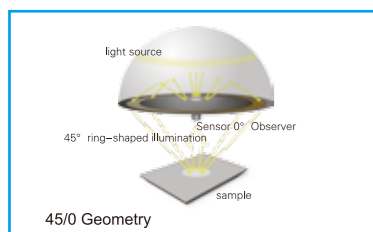
# CRX-50/51/52

## Instrument Advantages

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

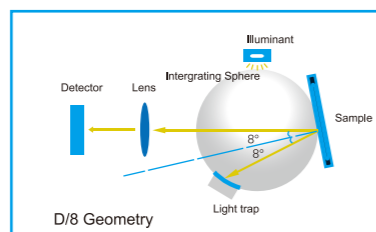
### CRX-50

- 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  $\pm 3\text{mm}$



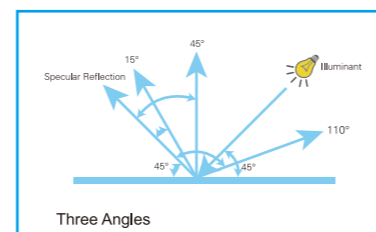
### CRX-51

- 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.



## Technical Data

Type	CRX-50	CRX-51	CRX-52	
Illumination / Viewing System	45/0, (illumination, 0° Viewing)	D/8 (Diffused Illumination, 0° Viewing)-SCI (specular component included)	45° illumination, 15°, 45°, 110° Viewing	Measurement Interval
Light Sources	CLEDs (Full Wavelength Balanced LED Light Source)			2S
Sensor	Dual Light Path Sensor Array		Silicon Photodiode	Repeatability
Measurement Distance	7.5±3mm (Repeatability in the case of Distance Fluctuations $dE < 0.1$ )	0.5mm	Contact to Measure	Chromaticity Value: $\Delta E^*ab$ standard deviation $\leq 0.03$ , Max. $\leq 0.05$ (a white calibration tile is measured 30 times at 1- second intervals after white calibration)
Calibration Method	Build-in Calibration Tiles			Color Space and Other Indices
Protection Level	Without	IP67	Without	CIE-L*a*b, L*C*h, Graininess
Wavelength Range	400-700nm			Color Difference
Wavelength Interval	10nm			$\Delta E^*ab, \Delta E^*CH, \Delta E^*uv, \Delta E^*cmc(2:1), \Delta E^*cmc(1:1), \Delta E^*94, \Delta E^*00$
Half Band Width	5nm			Light Source Lifetime
Reflectance Range	0-200%			Whole Life Time Warranty
Measurement Aperture	$\phi 7\text{mm}$	$\phi 10\text{mm} (\phi 4\text{mm optional})$	$\phi 7\text{mm}$	Working Temperature
Measurement Distance	7.5mm			0-45°C, relative humidity 80% or below (at 35°C), no condensation
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			Storage Environment
Measurement Time	Min. 20ms	Min. 20ms	6s	-25-55°C, relative humidity 80% or below (at 35°C), no condensation
Inter Instrument Agreement	$\Delta E^*ab$ within 0.2 (BCRA Series II, average measurement of 12 tiles)		$\Delta E^*ab$ within 0.5 (BCRA Series II, average measurement of 12 tiles)	Power Adaptor
				DC12V
				Interface
				USB or custom made
				Power
				12V DC Power Adaptor