






Comparisons - Colorimeters

					
Feature / Spec	CR8 Spectro ColorReader	NR110 Precision Colorimeter	NR145 Precision Colorimeter	NR200 Precision Colorimeter	NR20XE Precision Colorimeter
Price	\$632.00	\$846.00	\$887.00	\$1,017.00	\$914.00
Illumination Geometry	8°:d/8 (diffuse illumination,8- degree viewing)	8°: 8/d(8 degrees illumination, diffuse reflectance reception)	45°: (45 direction incident/0 degree reception)	8°: 8/d(8 degrees illumination, diffuse reflectance reception)	45°: (45 direction incident/0 degree reception)
Measurement Conditions	CIE Standard Illuminant D65,10° Observer	CIE Standard Illuminant D65,10° Observer	CIE Standard Illuminant D65,10° Observer	CIE Standard Illuminant D65,10° Observer	CIE Standard Illuminant D65,10° Observer
Measuring Aperture Diameter	8 mm(optional Φ4mm)	4mm platform diameter+4mm tip diameter	8mm	8 mm	20mm
Spectral Range	400-700 nm	-	-	-	-
Spectral Resolution	10 nm	-	-	-	-
Measurement Range	L*:0-100 a*:-128 - +127 a*:-128 - +127	L*:0-100 a*:-128 - +127 a*:-128 - +127	L*:0-100 a*:-128 - +127 a*:-128 - +127	L*:0-100 a*:-128 - +127 a*:-128 - +127	L*:0-100 a*:-128 - +127 a*:-128 - +127
Repeatability	ΔE*ab 0.04 (average of 30 measurements on white tile)	ΔE*ab 0.08 (average of 30 measurements on white tile)	ΔE*ab 0.08 (average of 30 measurements on white tile)	ΔE*ab 0.08 (average of 30 measurements on white tile)	ΔE*ab 0.08 (average of 30 measurements on white tile)
Inter-Instrument Agreement	ΔE*ab 0.35 (average of 12 BCRA Series II color tiles)	ΔE*ab 0.4 (average of 12 BCRA Series II color tiles)	ΔE*ab 0.4 (average of 12 BCRA Series II color tiles)	ΔE*ab 0.4 (average of 12 BCRA Series II color tiles)	ΔE*ab 0.4 (average of 12 BCRA Series II color tiles)
Measurement Time	Approx. 1.5 second	Approx. 1.5 second	Approx. 1.5 second	Approx. 1.5 second	Approx. 1.5 second
Display	3.5-inch TFT color LCD touchscreen	2.4-inch TFT color LCD touchscreen	2.4-inch TFT color LCD touchscreen	2.4-inch TFT color LCD touchscreen	2.4-inch TFT color LCD touchscreen
Interface	USB, Bluetooth® 5.0	USB	USB	USB	USB
Battery Life	Approx. 3 million measurements	Approx. 1.6 million measurements	Approx. 1.6 million measurements	Approx. 1.6 million measurements	Approx. 1.6 million measurements
Dimensions (LxWxH)	81X71X214mm	205X67X80mm	205X67X80mm	205X70X100mm	205X67X80mm
Weight	460g	400g	400g	400g	400g
Accessories	Standard accessories plus optional accessories	Standard accessories plus optional accessories	Standard accessories plus optional accessories	Standard accessories plus optional accessories	Standard accessories plus optional accessories
Software Support	Included software for data analysis	Included software for data analysis	Included software for data analysis	Included software for data analysis	Included software for data analysis