

- DATA OUTPUT
- CONCAVE GRATING SPECTROPHOTOMETRIC
- Ø8/4mm DUAL APERTURE
- BLUETOOTH



PORTABLE SPECTROPHOTOMETER (ADVANCED TYPE) CODE 9710-30



- Concave grating spectrophotometric
- 3.5 inch TFT color LCD, capacitive touch screen, 256 image element double arrays CMOS image sensor
- D/8 geometrical optics, conforms with CIE No.15, ISO7724/1, ASTM E1164, DIN5033 Teil 7
- Use long life and low power consumption combined LED light source
- Camera locating function, switchable 8mm/4mm aperture, support both SCI and SCE at the same time
- Large capacity storage space, over 20,000 measurement data
- USB port and Bluetooth 4.0
- Two standard observer angles, a variety of illuminant, a variety of color indexes, conforms with a variety of standard colorimetric data,
- Measure sample spectra, accurate Lab data, can be used in color matching and accurate color transmission



SPECIFICATION

Optical geometry	reflect: di: 8°, de: 8° (diffused illumination, 8-degree viewing angle)
Integrating sphere size	Ø48mm
Light source	combined LED light, UV light
Spectrophotometric mode	concave grating
Sensor	256 image element double array CMOS image sensor
Wavelength range	400~700nm
Wavelength interval	10nm
Semiband width	10nm
Measured reflectance range	0~200%
Measuring aperture	dual aperture: MAV: Ø8mm; SAV: Ø4mm
Specular component	SCI & SCE
Color space	CIE LAB, XYZ, Yxy, LCh, CIE LUV, Hunter LAB
Color difference formula	ΔE^*ab , ΔE^*uv , ΔE^*94 , ΔE^*cmc (2:1), ΔE^*cmc (1:1), ΔE^*00v , ΔE (Hunter)
Other colorimetric index	WI (ASTM E313, CIE/ISO, AATCC, Hunter), YI (ASTM D1925, ASTM 313), Metamerism index MI, Staining fastness, Color fastness, Color strength, Opacity
Observer angle	2°/10°
Illumination	A, C, D50, D55, D65, D75, F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12, CWF, U30, Tl83, Tl84, U35
Displayed data	spectrogram/values, samples chromaticity values, color difference values/graph, PASS/FAIL result, color offset
Measuring time	2.6s
Repeatability	spectral reflectance
	colorimetric values
	MAV/SCI, within 0.08% of standard deviation (400~700nm: 0.18%)
	MAV/SCI: $\Delta E^* \leq 0.03$
Inter-instrument error	MAV/SCI: $\Delta E^* \leq 0.15$
Measurement mode	single measurement, average measurement
Data port	USB, Bluetooth 4.0
Data storage	standard 1000 pcs, sample 28000 pcs
Illuminant life span	5 years, more than 3 million times measurements
Battery	Li-ion battery, 5000 measurements within 8 hours
Dimension (L×W×H)	184×77×105mm
Net weight	600g



white and black calibration cavity (included)



printer (optional)



measurement



reflectivity

software

report

measurement data is exported to EXCEL

software (included), test can be controlled from the software, display test data, report

STANDARD DELIVERY

Main unit	1 pc
White and black calibration cavity	1 pc
Software and USB cable	1 pc
AC/DC adapter	1 pc

OPTIONAL ACCESSORY

Printer	9710-PRINTER
Powder test box	9710-POWDERBOX
Universal test kit	9710-TESTKIT