

MULTI-ANGLE SPECTROPHOTOMETER

CODE 9710-MS45

CONCAVE GRATING
SPECTROPHOTOMETRIC

BLUETOOTH

DATA
OUTPUT

- Adopt 5 illumination sources, 1 receiver to measure 5 measurement angles at the same time
- Touch screen can display all angle measurement results, more intuitive view of the comprehensive data
- Full spectrum illumination measurement is more professional to avoid spectrum loss
- Provide 6 color spaces, multiple observation light sources
- Using concave grating spectrophotometric technology, with higher resolution, makes color measurement more accurate
- Built-in color camera positioning, can accurately judge the object measured position, and improve the measurement efficiency and accuracy
- Multiple functions, the screen can display various data intuitively



SPECIFICATION

Measurement geometry	5 measurement angles (5 illumination sources, 1 receiver)
Measuring angle	45° receiver: 45as15°, 45as25°, 45as45°, 45as75°, 45as110°
Lighting source	full spectrum LED light source with blue enhancement
Lamp life	5 years, 3 million times measurements
Spectrophotometric mode	concave grating
Sensor	256 image element double array CMOS image sensor
Wavelength range	400nm~700nm
Wavelength interval	10nm
Measurement range	0~600%
Semiband width	10nm
Measuring aperture	illuminant Ø23mm/sampling Ø12mm
Color space	CIE LAB, XYZ, Yxy, Lch, βxy, DIN Lab99
Color difference formula	ΔE*ab, ΔE*94, ΔE*cmc (2: 1), ΔE*cmc (1: 1), ΔE*00, DINΔE99, ΔE DIN6175
Other colorimetric index	flop index
Observer angle	2°/10°
Illuminant	D65, A, C, D50, D55, D75, F1, F2 (CWF), F3, F4, F5, F6, F7 (DLF), F8, F9, F10 (TPL5), F11 (TL84), F12 (TL83/U30)
Measuring time	approx, 1 second for one angle, approx, 5 seconds for all angles
Repeatability	spectral reflectance: standard deviation within 0.08% chromaticity value: ΔE*ab 0.03 (when a white calibration plate is measured 30 times at 5 second intervals after white calibration)
Reproducibility	ΔE*<0.10, avg on the gray tile of BCRA tile set, ΔE*<0.25, avg on the color BCRA tile set
Spectrophotometric mode	0.2ΔE*00 (avg on reference series II BCRA tile set)
Trigger mode	pressure sensing, trigger, key trigger, software trigger
Measuring mode	single measurement, average measurement (1~99), continuous measurement (1~99)
Locating method	color camera preview
Power	Li-ion battery, 3.7V, 3200mAh, continuous test 6000 times within 8 hours of full charge
Display screen	3.5-inch TFT color LCD, capacitive touch screen
Interface	USB, bluetooth 5.0
Date storage	standard 1000 pcs, sample 4000 pcs
Calibration	built-in white board parameters, external white board, black light trap
Calibration interval	4 hours, 8 hours, 24 hours, startup calibration
Dimension	195X83X128mm
Weight	1kg



specimen recording interface



specimen reflectance recording interface



black light trap (included)



white board (included)



bluetooth receiver (included)

STANDARD DELIVERY

Main unit	1pc
Black light trap	1pc
White board	1pc
Software and USB cable	1pc
Power adapter	1pc
Bluetooth receiver	1pc



wired printer (optional)

OPTIONAL ACCESSORY

Wired printer	9710-MS45-U
Wireless printer	9710-MS45-B



wireless printer (optional)