

# HANDHELD SPECTROPHOTOMETERS (ADVANCED TYPE)

MATCHING COLOR  
CARD QUICKLY

PLANE GRATING  
SPECTROPHOTOMETRIC

DATA  
OUTPUT

BUILT-IN  
BLUETOOTH

**INSPECTION  
CERTIFICATE**



white calibration cavity (included)



5710-HS05

- Plane grating spectrophotometric
- 3.5 inch TFT capacitive touch screen
- D/8 geometrical optics, conforms with CIE No.15, ISO7724/1, ASTM E1164, DIN5033 Teil 7
- Dual optical path system for more stable testing environment
- Includes both SCI and SCE measurement modes
- Use long life and low power consumption combined LED light source, include UV and exclude UV measurement
- Dual 40-array sensors, wider spectral response range
- Large capacity storage space, over 20000 measurement data



USB printer (optional)

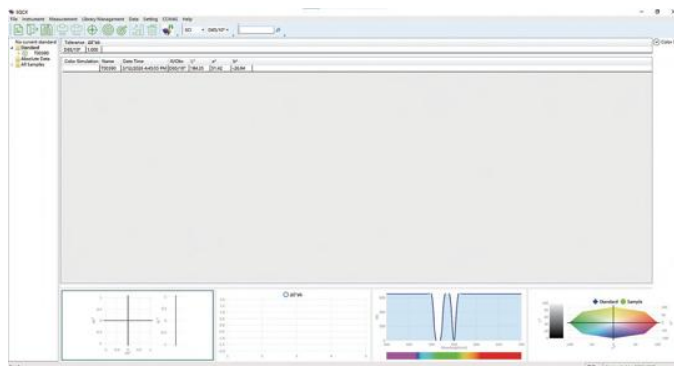


bluetooth printer (optional)

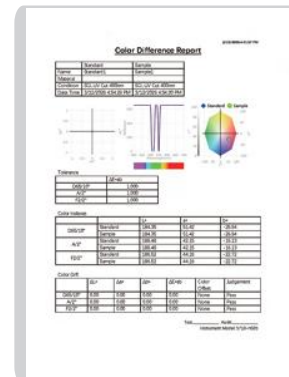


power test box (optional)

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



software interface



graphic report

## SPECIFICATION

<b>Code</b>	<b>5710-HS04</b>	<b>5710-HS05</b>
<b>Wavelength range</b>	400nm~700nm	360nm~780nm
<b>Measuring aperture</b>	MAV: Ø11mm, Ø10mm ; SAV: Ø5mm, Ø3mm ; MINI: 1×3mm	MAV: Ø12mm, Ø11mm, Ø10mm ; SAV: Ø6mm, Ø5mm, Ø3mm ; MINI: 1×3mm
<b>Light source</b>	combined LED light, UV light	
<b>Integrating sphere size</b>	Ø40mm	
<b>Spectrophotometric mode</b>	plane grating spectrophotometric	
<b>Sensor</b>	silicon photodiode array (40 groups in double rows)	
<b>Wavelength interval</b>	10nm	
<b>Measured reflectance range</b>	0~200%	
<b>Color space</b>	CIE-Lab, CIE-LCh, CIE-XYZ, CIE-Yxy, CIE-LUV, HunterLab, RGB, Munsell, βxy, DIN Lab99	
<b>Color difference formula</b>	$\Delta E^*ab$ , $\Delta E^*94$ , $\Delta E^*00$ , $\Delta E^*cmc$ (2:1), $\Delta E^*cmc$ (1:1), $\Delta E^*uv$ , DIN $\Delta Euv$ , $\Delta E$ (hunter)	
<b>Other colorimetric index</b>	spectrum reflectance rate, WI (ASTM E313-00, ASTM E313-73, CIE/ISO, AATCC, hunter, taubebergerstensby), YI (ASTM D1925, ASTM E313-00, ASTM E313-73), metamerism index MI, staining fastness, color fastness, strength (dye strength, tinting strength), opacity, 8-degree gloss, 555 Index, color density CMYK(A, T, E, M)	
<b>Observer angle</b>	2°/10°	
<b>Illumination*</b>	D65, A, C, D50, D75, F1, F2 (CWF), F3, F4, F5, F6, F7 (DLF), F8, F9, F10 (TPL5), F11 (TL84), F12 (TL83/U30)	
<b>Displayed data</b>	spectrogram/values, samples chromaticity values, color difference values/graph, PASS/FAIL result, color simulation, color offset	
<b>Display accuracy</b>	0.01	
<b>Measurement time</b>	about 1.5s	
<b>Repeatability</b>	<b>chromaticity value</b>	MAV/SCI, $\Delta E^*ab \leq 0.018$ (after whiteboard correction, measuring the whiteboard 30 times at 5s interval)
	<b>spectral reflectance</b>	MAV/SCI, standard deviation within 0.07% (400~700nm)
<b>Inter-instrument error</b>	MAV/SCI, $\Delta E^*ab$ within 0.2 (BCRA series II, average value of 12 color plates)	MAV/SCI, $\Delta E^*ab$ within 0.18 (BCRA series II, average value of 12 color plates)
<b>Measurement mode</b>	single measurement, average measurement (2~99 times)	
<b>Illuminant life span</b>	more than 1.5 million measurements in 10 years	
<b>Data port</b>	USB, Bluetooth	
<b>Data storage</b>	standard 500 pcs, sample 20000 pcs (one piece of data can include SCI+SCE at the same time)	
<b>Power supply</b>	3.7V, 5000mAh	
<b>Dimension (L×W×H)</b>	114×70×208mm	
<b>Net weight</b>	450g	

\*: illuminant can be customized

## STANDARD DELIVERY

<b>Code</b>	<b>5710-HS04</b>	<b>5710-HS05</b>
<b>Measuring aperture</b>	9 pcs	13 pcs
<b>Main unit</b>	1 pc	
<b>white calibration cavity</b>	1 pc	
<b>Bluetooth receiver</b>	1 pc	
<b>Power adapter</b>	1 pc	
<b>Data cable</b>	1 pc	
<b>Software</b>	1 set	

## OPTIONAL ACCESSORY

<b>USB printer</b>	<b>5710-UPTER</b>
<b>Bluetooth printer</b>	<b>5710-BPTER</b>
<b>Power test box</b>	<b>5710-POBOX</b>