



Portable Spectrophotometer

LSP-A20

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Portable spectrophotometer LSP-A20 is adopted with every test calibration ETC technology, where the standard white boards included in the optical system for reliability, accuracy of every measurement. The pulse xenon lamp is used for measurement of UV samples with wide wavelength range. Its Built-in camera helps to view measured area precisely. The automatic gloss compensation technology helps in measurement data for the surface of different gloss.

Features

- 2.8 inch TFT touch screen
 - Built-in camera for to measured area
 - Pulse xenon lamp as source of illumination
 - SCS system for accurate measurement repeatability
 - Simultaneous measurement of SCI & SCE
 - Equipped with gloss compensation technology
 - USB & Bluetooth data transmission
 - Customized for PANTONE color matching technology
 - Large storage capacity
 - Large capacity for rechargeable lithium battery
 - Can connect to mini printer for printing
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Applications

Portable spectrophotometer has applications in textile, plastic, food, paint, printing, automobile industries, laboratories & on-site applications for quality control purpose.

Specifications

Model no.	LSP-A20
Illumination	Observation angles $2^{\circ}/10^{\circ}$ Illumination: d/8 (Diffused lighting, 8° observation angle) SCI (specular reflection included) & SCE (specular reflection excluded) simultaneous measurement
Size of integrated sphere	40 mm, alvan diffused reflection surface coating
Illumination light source	Pulse Xenon Lamp
Repeatability	Light splitting reflectivity: standard deviation within 0.08% color values: $\Delta E^*ab \leq 0.015$ (After calibration, standard deviation of 30 measurements on test white board, 5 second intervals), Maximum: 0.04
Sensor	Dual light path sensor array
Light source	A, C, D50, D65, D75, F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12, DLF, TL183, TL184, NBF, U30, U35, CWF
Wavelength range	360-740nm
Wavelength interval	10nm
Half spectral width	5nm
Reflectivity range & resolution	0 to 200%, 0.01%
Observation angle	$2^{\circ}/10^{\circ}$
Measurement time interval	2 seconds
Measurement time	2 seconds
Measuring aperture	8 mm
Color space	CIE-L*a*b, L*C*h, L*u*v, XYZ, Yxy, Reflectance, hunterlab, munsell Mi, CMYK, RGB, HSB
Color difference formula	ΔE^*ab , ΔE^*CH , ΔE^*uv , $\Delta E^*cmc(2:1)$, $\Delta E^*cmc(1:1)$, ΔE^*94 , ΔE^*00 , ΔEab (Hunter), 555, color classification

Specifications

Other colorimetric indices	WI (whiteness) (ASTM E313-10, ASTM E313-73, CIE/ISO, AATCC, Hunter, Taube Berger, Ganz, Stensby), YI (yellowness) (ASTM D1925, ASTM E313-00, ASTM E313-73), Tint(ASTM E313, CIE, Ganz), Metamerism index Milm, adhesive, Staining fastness, color fastness, ISO b/changing Color fastness, ISO brightness, 8 glossiness, A, T, M, E density
Color matching system	Matches
UV light source	Included
Work temperature range	0°C~45°C, relative humidity 80% or below (at 35°C), no condensation
Storage temperature range	25°C to 55°C, relative humidity 80% or below (at 35°C), no condensation
Data being displayed	Reflective graph/value, sample's color values, color difference values/graph, pass/fail results, color error tendency, color simulation display measurement area, history data color simulation manual input standard sample generate measurement report
Interface	USB, Bluetooth
Data storage	100 test samples, 200 measurement records for each sample
Display	True color TFT touch screen
Light source longevity	10 years, 3 million tests
Dimension (L*W*H)	181×73×112mm
Weight	550 g

Standard Accessories

Accessories No.	Name
1	Power cord
2	USB cable
3	Driving software
4	Color QC software
5	Black and white calibration tile