



## Presto Stantest Pvt. Ltd.

I-42, DLF Industrial Area Phase-1, Delhi Mathura Road, Faridabad 121003, Haryana, India

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# Benchtop Spectrophotometer



Model – FS890

### Overview

The Benchtop Spectrophotometer FS890 is an advanced analytical instrument designed to measure color, appearance, reflectance, and transparency across a wide range of industries including printing, plastics, textiles, coatings, food, and packaging. It plays a crucial role in ensuring product quality and consistency by quantifying color values under standardized lighting conditions, helping manufacturers maintain brand integrity and meet regulatory requirements.

This equipment is particularly important in industries where visual properties like gloss, opacity, and transparency influence consumer perception and product functionality. By providing accurate measurements of reflectance and transmittance, the spectrophotometer enables precise formulation, quality control, and compliance with global standards (CIE, ASTM, ISO). Its robust design, multiple measurement apertures, and advanced data analysis



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capabilities make it a critical tool for research labs, production units, and quality assurance departments.

### Technical Specifications

Parameter	Specification
Illuminant	360nm-780nm Combined LED Lamp, 400nm cut-off
Sensor	256 Image Element Double Array CMOS Image Sensor
Wavelength Pitch	10 nm
Semiband Width	10 nm
Reflectance Range	0-200%
Measuring Aperture	Reflective: $\Phi 30\text{mm}/\Phi 25.4\text{mm}$ , $\Phi 18\text{mm}/\Phi 15\text{mm}$ , $\Phi 10\text{mm}/\Phi 8\text{mm}$ , $\Phi 6\text{mm}/\Phi 4\text{mm}$ ; Transmissive: $\Phi 30\text{mm}$ , $\Phi 25.4\text{mm}$
Integrating Sphere Size	$\Phi 154\text{mm}$
Optical Geometry	Reflectance: d/8 (SCI&SCE; Include UV/Exclude UV); Transmittance: d/0 (SCI&SCE; Include UV/Exclude UV)
Conformance	CIE No.15, GB/T 3978, GB 2893, GB/T 18833, ISO7724/1, ASTM E1164, DIN5033 Teil7
Color Space	CIE LAB, XYZ, Yxy, LCh, CIE LUV, Musell, s-RGB, HunterLab, $\beta_{xy}$ , DIN Lab99
Color Difference Formula	$\Delta E_{ab}$ , $\Delta E_{uv}$ , $\Delta E_{94}$ , $\Delta E_{cmc}(2:1)$ , $\Delta E_{cmc}(1:1)$ , $\Delta E_{00}$ , $DIN\Delta E_{99}$ , $\Delta E_{(Hunter)}$
Observer	$2^\circ / 10^\circ$
Illuminants	D65, A, C, D50, D55, D75, F1-F12
Measurement Time	About 3 s (Measure SCI & SCE about 6s)
Repeatability	Spectral reflectance: $\Phi 25.4\text{mm}/\text{SCI}$ , SD within 0.05% (400-700 nm: within 0.04%); Chromaticity value: $\Phi 25.4\text{mm}/\text{SCI}$ , SD $\Delta E^*_{ab}$ within 0.02; Spectral Transmittance: $\Phi 25.4\text{mm}/\text{SCI}$ , SD within 0.05% (400-700 nm: within 0.04%); Chromaticity value: $\Phi 25.4\text{mm}/\text{SCI}$ , SD within $\Delta E^*_{ab}$ 0.03
Inter-instrument Error	$\Phi 25.4\text{mm}/\text{SCI}$ , Within $\Delta E^*_{ab}$ 0.15 (Average for 12 BCRA Series II color tiles)
Working Environment	Temperature: 0~40°C; Humidity: 0~85% (No Condensation)
Storage Environment	Temperature: -20~50°C; Humidity: 0~85% (No Condensation)



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Data Storage Capacity	Standard 5000 Pcs, Sample 40000 Pcs (one PCS can include both SCI and SCE)
Light Source Device Life	5 years, more than 3 million times measurements
Screen	7" TFT Capacitive Screen-touch Display
Data Port	USB & Bluetooth
Standard Accessory	Power adaptor , manual, standard calibration plate, Checking Green Board, Sample Holder, Φ4 mm, Φ8 mm, Φ15 mm, Φ25.4mm ,USB Cable, User Guide, PC Software, Transmissive Test fixture Assembly
Size	370x300x200 mm
Weight	9.6 kg
Power Supply	DC 24V, 3A Power Adapter

Optional Accessories –

Micro-Printer , Transmissive Test clamp component

Thank you customers for choosing us as your partners in growth !



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### OUR OTHER PRODUCTS :-

Box Compression Tester Digital cum Computerised	Scuff Resistance Tester	Tensile Tester Digital	Spectrocolorimeter	Cobb Sizing Tester	Digital GSM Balance

