

Datacolor® Spectro P Series

Precision portable color measurement



Datacolor Spectro P Series is engineered for precision and versatility across a wide range of quality control applications.

Spectro P200

Streamlined Color Quality Control for Industrial Applications

Spectro P300

Advanced Color Precision for Critical Quality Evaluations



Benefits

Precision & Repeatability You Can Trust

- High measurement accuracy ensures reliable, objective color evaluation
 - Superior inter-instrument agreement (IIA) delivers consistency across multiple devices and locations
 - Repeatable, lab-grade measurements reduce variability and improve color quality control
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Portability Built for Industrial Environments

- Lightweight, ergonomic design for easy use in lab or production settings
 - Rechargeable, removable Li-Ion battery supports extended use
 - Industrial design ensures reliability in demanding production environments
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Ease of Implementation into Your Workflow

- Bluetooth, USB, and WiFi* connectivity enable effortless data transfer
 - Smart data grouping and pass/fail decisioning streamline quality control processes
 - Large onboard storage (1,000 standards / 5,000 batches) for easy access to measurement data
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Versatility for Your Industry Needs

- Single and dual aperture options to accommodate different sample types
- Advanced UV calibration* available for optical brightener applications
- Seamlessly integrates into existing color workflows, from quality control to formulation



Use Cases

Quick and Simple Quality Control

Ensure every product meets your standards with ease.

Fast, precise, and repeatable color measurements simplify quality control with the Spectro P Series portable spectrophotometers. An intuitive design and efficient workflows make it easy to verify raw materials and finished goods with confidence, ensuring accuracy and consistency without delays.



On-the-Go Color Analysis

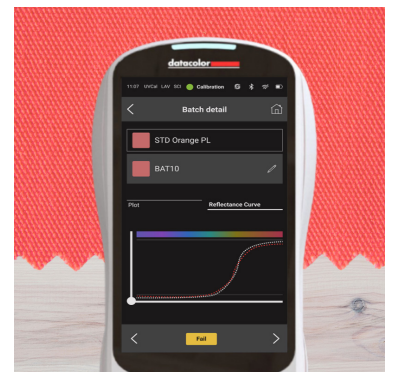
Take color measurement wherever it's needed.

Lightweight and portable, the Spectro P Series delivers flexibility for mobile teams and dynamic production environments. With advanced Bluetooth® and Wi-Fi* connectivity, measurements sync effortlessly to centralized systems, enabling real-time communication and decision-making - anytime, anywhere.

Production QC Workflow

Seamless integration for reliable, efficient quality control.

Designed for demanding environments, Spectro P Series spectrophotometers enhance production workflows with precision and repeatability. Whether for routine checks or in-line monitoring, they ensure batch-to-batch consistency while providing actionable insights without disrupting operations.



Managing Color Quality Across Fleets

Achieve consistency across your supply chain.

High inter-instrument agreement (IIA) across multiple devices and locations ensures repeatable color measurements throughout production. By maintaining strict color tolerances from batch to batch and across facilities, the Spectro P Series supports seamless color management at every step.

Technical Specs

	Spectro P300	Spectro P200
Measuring Geometry	d/8°	
Sphere Diameter	54 mm (2.5 inches)	
Light Source	Pulsed Xenon	
Spectral Range	400-700 nm	
Effective Bandwidth	10 nm	
Reflectance Range	0-200%	
Spectrophotometer Principle	Concave holographic grating	
Observer	2° Standard Observer, 10° Standard Observer	
Detector	Dual 256 element diode array	
Color Repeatability	<0.03 CIELab dE* max on white ceramic tile	<0.05 CIELab dE* max on white ceramic tile
Color IIA	0.15 CIELab dE*avg of 12 BCRA tiles 0.25 CIELab dE* max on any BCRA tile	0.20 CIELab dE*avg of 12 BCRA tiles
Measurement Time	2 sec (Gloss off & Image capture off)	
Measurement Interval	3.67 sec (Gloss on & Image capture on with 2 flashes)	
UV Setting	100% / 0% / Adjusted (Instantaneous numerical adjustment of UV with no mechanical filter) 400 nm UV cutoff filter	100%
UV Calibration Support	CIE Whiteness / Ganz-Griesser	-
Apertures		
Illuminated / measured	<u>Dual Apertures</u>	<u>Single Apertures</u>
LAV: 15mm / 11mm	LAV/SAV	LAV
SAV: 10mm / 6.5mm	LAV/USAV	SAV
USAV: 6.5mm / 2.5mm	SAV/USAV	USAV
Battery Type	Rechargeable Li-Ion Battery (Removable)	
Battery Performance	2000+ Dual Flash Measurements	
Sample Placement	Camera (Live View Alignment)	
Interface	USB-C / Bluetooth® / Wi-Fi	USB-C / Bluetooth®
Operating Environment	5° to 40°C up to 85% RH, non-condensing	
Screen Display	4" TFT LCD 480x800 Pixels Display with Touchscreen	
Display Resolution	480 x 800	
Weight	0.81 Kg (1.8 lbs)	
Dimensions	229 x 89 x 81 mm (L x W x H)	

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Color Evaluations	CIELabCh, CIELab, CIELCh, XYZ, Whiteness CIE, Whiteness E313, Yellowness E313, Reflectance, Measurement Parameters, CMC, CIE94, CIE2000, Hunterlab, 555 Sort Code, Metamerism DIN, Metamerism CIE, Whiteness Stensby, Whiteness Berger, Whiteness Hunter, Strength, Contrast Ratio, ISO/AATCC Fastness, ISO/AATCC Staining, FMC II, PQS II, PQS II GEE9F6, LRV Equation, Optical Density*	
Illuminants	A, C, D65, D50, D55, D75, F02, F07, F11, TL83, TL84, U3000, Horizon, U3500, LEDT8G, LED-B1, LED-B2, LED-B3, LED-B4, LED-B5, LED-BH1, LED-RGB1, LED-V1, LED-V2	
Result Display Items	Colorimetric Values / Pass-Fail Judgment / Color Difference Plot / Reflectance Curve / Captured Image	Colorimetric Values / Pass-Fail Judgment / Color Difference Plot
Data Storage	1000 standards, 5000 batches	
Languages	English, French, German, Spanish, Italian, Simplified Chinese, Korean, Portuguese, Polish	
Export Data Format	QTX, CSV, CXF, Excel	
Datacolor Software Compatibility	Tools, Match Station, Match Textiles, Match Pigment, Paint, Colibri	



To request a demo, visit www.datacolor.com/pseries

User Guide



Technical Support



Glossary

