

TXL-GEN-021 / 28 October 2026 · One-year manufacturer warranty

Portable Spectrophotometer (DS-620)

Portable spectrophotometer for colour difference, fastness, whiteness, yellowness, metamerism and colour strength assessment of textile samples. d/8° geometry, SCI/SCE, 400–700 nm (10 nm interval), repeatability $\Delta E^*_{ab} \leq 0.03$; Ø11/Ø6/Ø3 mm apertures, 3.5-inch colour display, USB and Bluetooth. Windows colour quality control software is included as standard; colour recipe (formulation) software is optional and separately licensed.



Model technical data

1	Measuring geometry: d/8°, SCI / SCE.
2	Repeatability: $\Delta E^*_{ab} \leq 0.03$; inter-instrument agreement: $\Delta E^*_{ab} \leq 0.30$.
3	Spectral range / interval: 400–700 nm / 10 nm.
4	Reflectance range / resolution: 0–200% / 0.01%.
5	Observer: 2° / 10°; illuminants D65, TL84, A, CWF and other evaluation conditions.
6	Measuring apertures: Ø11 / Ø6 / Ø3 mm; six configurations.
7	Light source: LED + UV; typical measuring time about 1 second.
8	Display / memory: 3.5-inch colour display / 10,000 records.
9	Connectivity: USB, Bluetooth; Windows and mobile app.
10	Applications: colour difference, fastness, whiteness, yellowness, metamerism and colour strength assessments.
11	Software: Windows colour quality control software included as standard.
12	Colour recipe software (ColorRecipe): optional, separately licensed; not included with the standard instrument or the colour quality control software. Dye database and recipe calculation, cost comparison, laboratory correction, recipe history and reporting; dye and substrate calibration work is planned separately.

Physical specifications and utilities

Electrical supply	Approx. rechargeable internal battery; charger 100–240 V AC, 50/60 Hz; build-dependent.
Power / connected load	Approx. 5–20 W connected load for preliminary planning.
Overall instrument dimensions	Approx. 90 × 90 × 230 mm (W × D × H).
Instrument weight	Approx. 0.5–1 kg net.
Gross / shipping weight	Approx. 2–4 kg gross; estimated packing allowance.
Interfaces	USB, Bluetooth; Windows and mobile app.
Lab requirements	Clean, dust-free workspace; specimens are conditioned per the selected method.

Dimension order and approximate values are stated in each row. Packaging data are separate from instrument dimensions and net mass. Approx. rows are preliminary engineering estimates based on comparable equipment and function/capacity; they are not verified manufacturing measurements or standard requirements. Installation and shipment are finalised against the approved drawing and nameplate. Estimate scope: base product / one unit; external computer, bench and auxiliary plant excluded.

Specifications, dimensions, and power requirements are approximate and subject to change without prior notice for continuous design improvements.

Product technical specifications and images may vary according to manufacturing conditions and applicable standards.

Test and configuration

Measured output / function	Spectral reflectance, colour coordinates and colour difference (ΔE^*_{ab})
Parameters selected for the method	Geometry (SCI/SCE), aperture, illuminant and observer
Verification points	Calibration, repeatability and reference sample

Control and recording specification

Method-specific software and recording requirements follow. Delivered software modules are defined by the order scope.

- Method code and edition, specimen ID, operator and selected test parameters are linked to the record.
- Measuring geometry (SCI/SCE), aperture, illuminant and observer are written to each measurement record; the colour-difference formula is stated in the report.
- Raw measurements, units, valid/invalid test flags and the reported result remain traceable.
- Calculations are checked against known inputs and an independent calculation; sensor channels are checked against calibration values.

Related test methods

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Listed methods are application references. Suitability is established by assessing hardware, method edition and calibration together.