PORTABLE COLOUR ANALYSIS

LS176

Portable Spectrophotometer

Measure sample colour, compare it with a reference and evaluate colour difference numerically. Compact body, touch screen and computer connectivity for practical colour control from production to the laboratory.



D/8 · SCI	8 mm	~1 second
Measuring geometry	Measuring aperture	Measuring time

Simplify colour control

Measurement and comparison: colour scanning, QC evaluation with adjustable tolerance and electronic colour-card matching.
Analysis and records: spectral reflectance curve, 1,000 colour and 1,000 comparison records.
Applications: colour control of paints, plastics, metal coatings, decorative surfaces and, with suitable sample preparation, textiles.

Contact TLI for the measuring solution that suits your samples.

Technical specifications

Model reference: LS176

Optical structure	D/8, SCI; full-spectrum LED
Spectral range / interval	400-700 nm / 10 nm
Aperture / measuring time	8 mm / about 1 second
Measuring condition	D65 illuminant / 10° observer
Repeatability	ΔE*ab ≤ 0.03 (standard deviation)[1]
Inter-instrument agreement	ΔE*ab ≤ 0.4; mean of 12 BCRA Series II tiles
Colour spaces	CIE Lab, Luv, LCh, Yxy, CMYK, RGB, Hex
Other outputs	Whiteness / yellowness indices, spectral reflectance
Colour difference formulae	ΔE*ab, ΔE*uv, ΔE*94, ΔE*00, CMC
Display	3.5-inch IPS touch screen; 480 × 320 pixels
Connectivity / interface	USB Type-C and Bluetooth / Turkish and English
Power / charging	Rechargeable lithium battery; USB Type-C
Measuring capacity	Up to 10,000 measurements per full charge[2]
Dimensions	179 × 64.5 × 93 mm
Operating environment	0-45 °C; 0-85% RH, non-condensing

[1] On a white reference after calibration, 30 measurements at 3-second intervals. Repeatability is not absolute colour accuracy.
[2] Actual operating time varies with connection and measuring conditions.

Software and scope of delivery

Connectivity: USB Type-C and Bluetooth; mobile app and Windows colour measurement software. Colour sharing with the mobile app; colour difference analysis and data transfer with the Windows software. Scope of delivery: instrument, USB cable, cleaning cloth, positioning plate, manual and calibration report. The exact scope of delivery is stated in the quotation.

Power and operating requirements

The instrument runs on its battery; no direct mains phase/frequency is applied. Use in a clean, dry, non-condensing environment with the measuring window seated fully on the sample.

TLI / TexLab Instruments · Product information revision: 20 November 2026.
The appearance and accessories of the delivered product are determined by the confirmed order.

Technical specifications, dimensions and power requirements are approximate and may change without prior notice due to continuous design improvement. Product images may differ according to the delivered configuration.