

# Datacolor® Elrepho 1000

Trusted performance for the paper and calcium carbonate industry



For color and quality control experts in the paper and pulp and supporting industries, the Datacolor Elrepho 1000 solution ensures acceptability of whiteness, brightness, opacity, diffuse reflectance factors, yellowness, and color in production and lab environments. The Datacolor Elrepho 1000 is a high-performance d/0 spectrophotometer ensuring quality and consistency. The Datacolor Elrepho 1000 offers dust protection, camera for sample alignment, sample temperature for production monitoring and allows for predictive maintenance.

## Benefits of Elrepho 1000:

- Designed to standards specific to the paper and pulp industry and specialty mineral applications:
  - Conform to ISO 2469: true dual beam spectrophotometer with diffuse/0° optical geometry, pulsed xenon light source approximating D65 and 34mm XLAV aperture plate.
  - ISO brightness calibration according IR3 standards within +/-0.1 R457 target value
  - ISO R457 brightness 20 measurements repeatability variation with +/- 0.2 tolerance on samples <140 CIE Whiteness
  - When combined with Datacolor Tools quality control software, it supports measurement procedures for the paper industry as defined by ISO, DIN, SCAN and TAPPI Standards.
- Easy operation, faster measurements and higher throughput with the vertical configuration and LCD screen for exact sample positioning.
- Confidence in instrument performance with improved dust protection, remote diagnostics and predictive maintenance capabilities.
- No need to remeasure standards with seamless backward compatibility with previous Elrepho spectrophotometers.

**Datacolor ELREPHO**



Datacolor Elrepho 1000 uses a USB or Ethernet connection to interface with USB connections to interface with the Datacolor Tools quality control software. It supports measurement procedures for the paper industry as defined by ISO, DIN, SCAN and TAPPI Standards.

**What you get:**

- Power Cable
- Connector cable
- Black trap
- White tile
- Green tile
- Fluorescent tile
- White Tile Calibration data on USB Memory Stick

**Aperture Plates:**

- Extra-Large Area View (XLAV)
- Small Area View (SAV)
- Ultra Small Area View (USAV)

Feature	Description
Instrument Type	Dual-beam spectrophotometer
Measurement Geometry	Diffuse illumination, 0° viewing in conformance with ISO 2469
Illumination Source	Pulsed xenon filtered to approximate D65
Sphere Diameter	152 mm / 6.0 in
Spectral Analyzer	SPX analyzer with dual 256 diode array and high-resolution holographic grating
Wavelength Range	360 nm to 700 nm
Reporting Interval	10 nm
Photometric Range	0 to 200%
Photometric Resolution	0.003%
20 Read Repeatability On The White Tile Using Dual Flash (CIELAB) <sup>(1)</sup>	0.02 CIEL*a*b* (max)
Inter-instrument agreement: reflectance measurements (CIELAB)	0.40 (max excluding black tile) CIEL*a*b* 0.25 (avg) CIEL*a*b*
Sample Temperature	XLAV Aperture 34 mm illuminated and 30 mm measured
IR Sensor Accuracy	±0.9°F/ ±0.5°C

Feature	Description
Lens	3 position, auto zoom
Aperture detection	Yes
Automated UV Control	Yes
UV cutoff filters	395nm, 420nm, 460nm
XLAV Aperture plate	34 mm illuminated and 30 mm measured
LAV Aperture (Optional - sold separately)	30mm illuminated and 26 mm measured
SAV Aperture plate	9 mm illuminated and 5 mm measured
USAV Aperture plate	6.5 mm illuminated and 2.5 mm measured
Remote Measurement Button	Yes
Sample Positioning Camera	Yes
Functional Operating Environment <sup>(2)</sup>	Temperature: 23°C +/- 1°C RH 50% +/-15%
Vertical Mount	Yes

Physical Specifications	Description
Color Display	3.5 inch RGB LCD
Display Resolution	320 x 240 pixel resolution
Weight	54.5 lbs (24.7 kg)
Dimensions	25.0" (63.5 cm) Height 12.2" (39.9 cm) Width 16.3" (41.4 cm) Depth
Power Requirements	100 - 240 VAC, Frequency 50/60 Hz, Power Rating: 80 VA
Data Interface	USB 2.0 / Ethernet

(1) Environmental Conditions: Temperature 23°C +/- 1°C RH 50% +/- 15%

(2) For reliable color measurements, conditions must be within recommended operating conditions.

(3) Color equation is CIE Lab, Specular Excluded, LAV, Measured on 12 BCRA Tiles

For more information, please visit [www.datacolor.com](http://www.datacolor.com)