



Brightness and Color spectrophotometer

ColorTouch® X ISO

Since 1980 Technidyne has been producing instruments that meet the ISO Optical Standards for the global pulp and paper industry. In 1994 Technidyne brought to market the ColorTouch®, which quickly set the standard for functionality, precision and dependability.

The ColorTouch® X brings together a powerful set of tools to meet the demands of the brightness, color, fluorescence and ERIC950® markets. In addition to these traditional applications, the expanded wavelength range of the ColorTouch® X provides a higher level of accuracy and capabilities.

No other instrument in the market today can match the ColorTouch® X for capabilities, functionality and quality.

Features:

- **Expanded Wavelength Range**
Provides improved analysis of UV region
- **New Intuitive Operator Interface**
Simple and responsive
- **Data Trending**
Trend data over time, grade run, shifts, etc.
- **Simultaneous Grade Tracking**
Track multiple grades from different sources at the same time
- **Pass/Fail Alerts**
Immediate notification of out of spec measurements
- **APP Technology**
Provides the foundation for adding new features as they become available or the development of custom APPS for your specific measurement or calculation
- Touch-Screen Interface
- Data Export in CSV and XML via Ethernet or USB
- FTP server connection capability
- Support with embedded TeamViewer
- Automated Calibration with Internal “working” standard
- APP Technology built-in for adding new features
- Exact conformance to ISO standards
- Now CE certified for compliance with European safety and regulatory standards.

Touchscreen Operation:

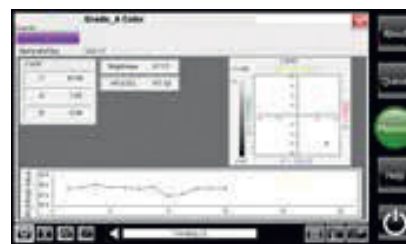
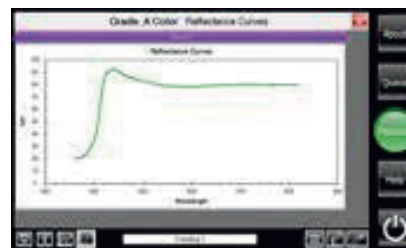
- Point & Touch and the ColorTouch® X does the rest
- Preprogrammed test routines to allow for easy setup and testing
- Does not require an external PC
- Automated calibration routine
- Internal working standard – unmatched in the industry

Advanced Data Analysis:

- Trending data allows for tracking grades over several samples
- Compare multiple samples on various color plots
- Establish optical tolerances on grades for PASS/FAIL analysis

Spectral Data Capabilities:

- Spectrophotometric data for comprehensive understanding of dyes, fillers and other colorants
- Greater accuracy of colorimetric data
- Thorough analysis of metameric color matches



Technical Specification:

Paper/Tissue/Board

ISO Standards:	2469, 2470, 2471, 11475, 11476, 12625, 5631, 3688
TAPPI Standards:	T519, T525, T527, T534, T560, T567 (Optional)
Sample Types:	• Letter • A4 Sheets • Sheeted Materials • Handsheets • Tissue • Towels • Powder/Minerals (pressed pellet)
Sample Thickness Range:	0–50,000 µm
Geometry:	Dual Beam d/0°
Specimen Area Measured:	28 +/- 3 mm
Specimen Aperture:	34 +/- 0.5 mm
Light Source:	Pulsed Xenon
Lamp Life: (# of measurements)	500,000
Detector:	CCD 131,000 px
Spectrometer:	Dual Blaze grating
Spectrometer Range:	200–1050 nm
Bandpass:	5nm
Calibration:	Traceable to NRC
Measurement Range:	0–200 % (Reflectance)
UV Sources:	D65, C, UV-EX, *UV1, *UV2 (*User Defined)
Automatic UV Control:	Auto-adjustment to calibrated UV sources
UV Filters:	UV Trim 395 nm/ UV Cutoff 420 nm

Observers:	CIE 2°, 10°
Illuminants:	C, D65, A, B, D50, D55, D75, F2, F7, F11
Photometric Nonlinearity:	0.10 %
Repeatability: (White tile avg. 20 readings)	<0.01 CIELAB DE
Reproducibility: (Interinstrument)	<0.20 CIELAB DE
Automated Calibration: (Quick Cal)	Yes (Internal Working Standard)
Automated Calibration: (Primary)	Yes** (Auto Data Entry via USB)
Display:	10.1 Color TFT 1024x600 WSVGA, PCT Multi Touch Screen
Hard Disk Drive:	32 GB Sata SSD
Measurement Time:	4–10 seconds (Measurement dependent)
Measurement Results:	• Brightness • Opacity • Whiteness (CIE, Hunter, ASTM) • Yellowness (Hunter) • Tint (CIE, Hunter) • Color (XYZ/Rx,Ry,Rz/ L,a,b/ L*,a*,b*/L*,C*,h/DWL,PUR,x,y,Y) • Color Difference • Fluorescence • Metamarism • Spectral Data – Wavelengths • 360–780 nm • Residual Ink – ERIC950° nm (Optional)
Reflectance Intervals:	1 nm, 5 nm, 10 nm, 20 nm
Statistics Average:	• Maximum Test Value • Minimum Test Value • Standard Deviation • Trending • Grade Tracking

**When using Technidyne Laboratory Calibration Standards

Technical Specification:

Data Views:	Tabular Color Space Plots Spectral Curves
Pass/Fail Alerts:	Yes (User Defined Specifications)
Stored Standards:	Yes
Data Communications /Ports:	• XML • CSV • Serial/USB (4) • Ethernet • FTP Server Connection • Capability
Automeasures:	Yes (User Defined Measurement Sequences)
Remote Support:	Yes – Via Embedded Teamviewer
User Interface:	Embedded software with Touch, Scroll & Swipe
Available Apps: (Optional)	• ERIC950® – Residual Ink • Concentration • Predicted Opacity (Abs Power & Coeff) • Specific Calibration (Simulate TAPPI Data) • Correlation (Align Data with Legacy Devices)
Printer: (Optional)	Optional USB Printer (Small Form factor thermal printer)
Recommended Operating Temp.:	10–32° Celsius (50–90° F)

Power Consumption: 200 watt max/
80 watts passive

Voltage/Frequency Requirement: 100–250v AC / 48–61 Hz

Weights & Dimensions

Depth: 40 cm (15.75 ")

Width: 33.5 cm (13.2 ")

Height: 60 cm (23.5 ")

Weight: 20.4 kg (45 lbs)

Country of Origin: U.S.A.



Disclaimer

The information contained in this document is liable to modification from time to time in the light of experience and our policy of continuous product development. Check the Industrial Physics website for the latest version.

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