

ColorTouch PC technidyne

IDM
instruments

10-11 Colorado Court, Hallam
Victoria 3803, Australia
Telephone: 61 3 9708 6885
Facsimile: 61 3 9708 6770
Email: idm@idminstruments.com.au
Web: www.idminstruments.com.au



Color
When
measurement has to be...

...QUICK EXACT VERSATILE

Count on the ColorTouch PC when decisions matter.

When making decisions on whether a product meets customer specifications, the need to have all the data to evaluate the product is necessary. The ColorTouch PC provides capabilities far beyond color evaluation.

Brightness

The ColorTouch PC is in exact conformance with ISO 2469 and 2470 for the measurement of ISO Brightness. A Certificate of Calibration for traceability to the ISO level III calibration is provided with Each ColorTouch PC.

Fluorescence

Samples may be measured under 4 different calibrated sources - C (ISO Brightness), D65 (outdoor daylight), UV-EX (no ultra violet energy), Ganz-Griesser. Plus 2 user-defined calibrated sources. Once calibration of these sources is completed, the instrument stores all settings so that calibration is accomplished internally each time a different source is selected. Spectral data measurements are made with and without fluorescence excitation. This allows complete analysis of the optical brightener's impact on the sample's brightness, whiteness and color shift.

Whiteness

In the paper industry, whiteness is becoming more important as a control parameter. The ColorTouch PC offers the capability of sampling whiteness under different fluorescing conditions. Whiteness values can be calculated under a variety of methods, including CIE/ASTM, Ganz-Griesser, TAPPI and Hunter.

Opacity

In addition to measuring ISO opacity, the ColorTouch PC provides scattering and absorption powers and coefficients along with contrast ratio. Changes in the values as the result of a change in grammage can also be instantly calculated.

Swing-in Calibration

Proper maintenance of the calibration point is the first step any organization should take to ensure that the data generated each day is accurate and precise. The ColorTouch PC utilizes an internal swing-in standard for calibration maintenance on a daily basis. This swing-in standard helps extend the time between primary calibration and improve repeatability and reproducibility.

Primary Calibration

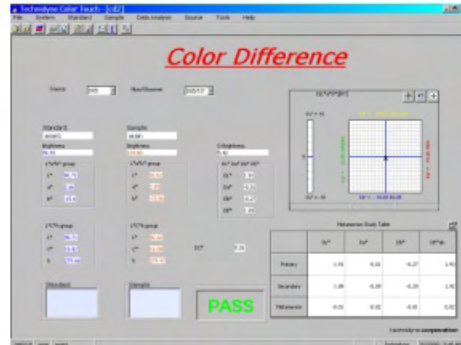
When it comes time to perform a primary calibration, the ColorTouch PC provides an automated calibration process. Technidyne supplies a disk which contains all the calibration data required for the instrument. All the operator needs to do is select the calibration function and follow the directions presented on the screen.

ColorTouch PC Software

Technidyne has designed a Windows™ based software package for operating the ColorTouch PC. This unique software provides the operator ultimate flexibility to develop and design specific operational presentations which are exactly what their testing requires. The Designer function of the software will allow for the creation of measurement presentations and functions. Additionally, the ColorTouch PC provides extensive capabilities for analyzing data from several different measurements and evaluating historical trends.

Sample Viewing

Measuring the correct location on the sample can be critical for accurate data. The new approach used with the ColorTouch PC makes this process easier and more functional. The ColorTouch PC incorporates an electronic camera to capture the sample image and presents the image in real time on the computer screen for exact positioning.



Optional Equipment

ERIC 950 - ERIC technology provides a control parameter specifically designed to measure the residual ink content of secondary fiber.

Variable Apertures - In addition to the ISO standardized aperture, the ColorTouch PC offers two other apertures:

- Medium Area View 15.8 mm
- Small Area View 7.8 mm

Count on the ColorTouch PC from Technidyne

ColorTouch PC Specifications

Light Source	Pulsed Xenon
Lamp Life (number of measurements)	500,000
Geometry	Dual Beam d/0
Standard Aperture Size	34mm
Optional Aperture Sizes	18mm, 10mm
Photometric Nonlinearity	0.1%*
Repeatability (white tile avg. 20 readings)	< 0.01 CIELAB DE**
Reproducibility (inter-instrument agreement)	< 0.20 CIELAB DE***
Measurement Time (typical)	2 seconds
Measurement Range: Reflectance	0-200%
Wavelength	400-700nm
Detector	Scanning Silicone Diode Array (256 elements)
Spectrometer	Dual Beam Holographic Grating
Bandpass (HPH)	10nm
Reflectance Data Intervals	5nm, 10nm, 20nm
Sources	D65,C, UVEX, Ganz-Griesser, 2 user defined
Illuminants	A, B, C, D50, D55, D65, D75, F2, F7, F11
Observers	CIE 2°, 10°
Color Scales	X Y Z, R(x) R(y) R(z), Lab, L*a*b*, L*C*h*, Luv, L*u*v*, DWL, PUR, xyY
Whiteness	CIE, E313, Hunter, Berger, Stephansen, Stensby, Ganz-Griesser, Taube
Tint	CIE, Hunter
Yellowness	Hunter, E313, E1925, DIN 6167
Opacity	Yes
Transparency	Yes
Fluorescence	Yes
Stored Standards	Yes
Color Difference	Yes
ERIC	Optional
Warm Up Time	None
Sample Viewing	Computer Display Via On-Board CCD Camera
Customizable Screen Forms	Yes
Automatic Calibration	Yes
Data Base for Results	Yes
Trending	Yes
User Defined Tolerances	Yes
Multiple Sample Comparison	Yes
Conforms to Industry Standards	ISO 2469, 2470, 2471, 3688 and 11476. TAPPI T519, T525, T527, T534 and T560.

