Advancing with Technology ElektroPhysik

Color Measurement

ColorTest

- portable colorimeter with external probe
- 45°/0° measuring geometry according to DIN 5033
- small probe head, spring-loaded
- automatic/manual start trigger
- simple 4 button menu control
- non-volatile memory for 1000 color readings **and** for 100 color readings including remission spectra
- backlit graphic display
- comprehensive data processing software

True spectral analysis!

Supplied by :

Test and Measurement Instruments C.C.

www.instrumentsgroup.co.za

t.m.i@iafrica.com Tel: 0027 (011) 683 4365

ColorTest – color measuring gauge

Advanced Color Measurement

Designed for high-precision color measurement, the versatile ColorTest works on the spectrophotometric principle which is by far the most advanced and precise color measurement method. Featuring a 45°/0° measuring geometry according to DIN 5033, the external probe illuminates the sample with a defined light source to measure spectrally the light remitted. ColorTest is ideal for:

- quality control on the production floor (reduced reject rates)
- color measurement and recording for quality conformance inspection for QM-systems according to DIN EN ISO 9000 standards
- color distance measurement (sample/reference)
- measurement of absolute color spaces (in a pre-selected color system and with selected type of standard illumination and observation angle)
- evaluation of measured color information (optional report software)

High repeatability, comprehensive report software and an excellent cost/performance ratio make ColorTest an indispensable and powerful tool for quality control. Other advantages:

- external, spring-loaded probe for measuring even small parts at any angle
- small probe head due to sample illumination through LEDs
- nonvolatile data memory for up to 1000 color readings **and** for 100 color readings including remission spectra
- serial data transmission

Supply Schedule

- ColorTest instrument
- NiMH rechargeable battery pack
- temperature secured charging station 100 – 240 V, 50/60 Hz AC
- white reference with BAM-calibration certificate
- CD-ROM with interactive instruction software and ColorDaTra demo-version
- foam padded plastic transport case

Optional Accessories

- **ColorDaTra** report-software:
  - **data transfer**
  - **data base** for color readings and spectral information
  - graphical display of **color coordinates** and **color differences** as related to stored color references, e.g. in the CIE L*a*b* color system
  - **trend line** capability
  - **quality-check:** selectable color distances ΔE, passed/failed tool
  - **statistics**
  - **printing function** for graphs and data reports
- RS-232C interface cable
- additional NiMH rechargeable battery pack
- precision support for measuring on smaller samples

Technical Data	
Measuring geometry:	45°/0° – circular illumination at 45°, measurement at 0° according to DIN 5033
Standard illumination:	D65, D55, A, C
Standard observer:	2° (1931) and 10° (1964)
Colormetric data and models:	XYZ, Yxy, ΔE CIE L*a*b*, ΔE CIE L*u*v*
Spectral range:	400 nm to 700 nm
Spectral resolution:	10 nm (internal, 3.5 nm)
Light source:	3 white and 3 blue light emitting circular diodes (ColorTest only suitable for non-fluorescent samples)
Power supply:	NiMH 6 Volt/1100 mAh, up to 1000 charging cycles
Battery life:	min. 1000 measurements
Size of probe head:	length L = 58 mm/2.28 inch (without cable joint)
	Max. Ø D = 28.5 mm/1.10 inch (without rubber grip end D = 25 mm/0.98 inch)
Basic instrument size:	(W x L x H) = 80 mm x 180 mm x 54 mm (W x L x H) = 3.14 inch x 7.08 inch x 2.12 inch
Display:	relative values, absolute values, remission spectrum
Ambient temperature:	15...35°C/59 to 95°F
Humidity:	max. 85 %, not condensing
PC interface:	serial data transfer via RS-232C
Weight:	600 g/21.16 oz incl. battery pack

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988-A1 Specifications subject to change without notice