

The Elcometer 6085 is an affordable sphere spectrophotometer, designed to give fast, precise and accurate colour measurement information on materials ranging from paper and paint to plastics and textiles.

- Lightweight, compact, portable instrument
- Diffuse/8° sphere optical geometry
- Fixed 8mm aperture
- Large, easy-to-read high res graphical colour LCD display
- Opacity and colour strength measurement
- Simultaneous measurement of both specular component included and specular component excluded
- Rugged construction
- Reliable detent lock
- Rechargeable battery for portable use



Elcometer 6085 Portable Sphere Spectrophotometer

STANDARDS:

AS/NZS 1580.601.3, ASTM C 609, ASTM D 2244, ASTM E 1164, ASTM E 308, ASTM E 313, BS 8493, DIN 5033-2, DIN 5033-3, DIN 5033-4, DIN 5033-7, DIN 6174, EN 12373-12, EN 13523-15, ISO 7724-2, ISO 7724-3, JIS K 5600-4-5, JIS K 5600-4-6, NF T36-006, NF X08-012-1, NF X08-012-2

Key Features

- **Measuring Functions and Indices**
The Elcometer 6085 provides absolute and difference measurements for the following colourimetric systems. These values can be obtained from any of the nine illuminants with 2° or 10° observer angle: L*a*b*, DL*Da*Db*, L *C*h°, DL*DC*DH*, DE*ab, DECMC, DE CIE94 and XYZ. Whiteness and Yellowness per ASTM E 313-98.
- **Pass/Fail Mode**
The instrument stores up to 1000 standards with tolerances for easy pass/fail measurement. A simplified green tick shown on screen shows a straight forward pass indication or a red cross to show a failed. Results are shown at a glance showing detailed colour comparison data for analyst.
- **Quick Colour Compare**
A quick measurement can be taken to compare two colours. This allows the operator to take quality control readings in a time efficient manner without having to create tolerances or store data.
- **The Sphere**
The Elcometer 6085's diffusing sphere is made of Spectalon®, a durable, highly reflective material designed to perform in a rigorous production environment. The diffusing material prevents degradation due to the flaking and chipping of the sphere wall material.
- **Opacity, Colour Strength and Shade Sorting**
The instrument can measure opacity as well as three colour-strength options: chromatic, apparent and tri-stimulus calculations. The Elcometer 6085 also performs 555 shade sorting. This is an important consideration in the colour quality control of manufactured products involving plastics, painted or textile materials.
- **Texture and Gloss influence**
To determine the influence of the specular component, the 6085 allows simultaneous measurement of both specular - included (colour) and specular-excluded (appearance).
- **User friendly Ergonomics**
In addition to on-board programmes to assist the operator in the measurement process, the instrument itself is highly user-friendly. It is compact and lightweight with an ergonomic overmold design that provides a smooth and comfortable grip. The flip-back shoe is designed to withstand heavy use, and has a reliable detent lock. Read-outs are large and easy to see with a high res colour LCD screen. A rechargeable battery pack allows extended operation of the instrument.

Technical Specification

C

Part Number	Description	Certificate
K6085M001	Elcometer 6085 Ci60 Portable Sphere Spectrophotometer	•
K6085M002	Elcometer 6085 Ci62 Portable Sphere Spectrophotometer	•
Measuring Geometrics	d/8°, DRS spectral engine, fixed 8mm aperture Simultaneous SPIN / SPEX	
Light Source	Gas filled tungsten lamp	
Illuminant Types	A, C, D50, D55, D65, F2, F7, F11 & F12	
Standard Observers	2° and 10°	
Spectral Range	400-700nm	
Memory	1,000 standards with tolerances, 4,000 samples	
Measurement Range	0 to 200% reflectance	
Measuring Time	Approximately 2 seconds	
Inter-Instrument Agreement (Ci60)	CIE L*a*b*: Avg. 0.40 ΔE^*ab based on average of 12 BCRA Series II tiles (specular component included) Max. 0.60 ΔE^*ab on any tile (specular component included)	
Inter-Instrument Agreement (Ci62)	CIE L*a*b*: Avg. 0.20 ΔE^*ab based on average of 12 BCRA Series II tiles (specular component included) Max. 0.40 ΔE^*ab on any tile (specular component included)	
Short-term Repeatability†	Ci60 - 0.10 ΔE^*ab on white ceramic (standard deviation) Ci62 - 0.5 ΔE^*ab on white ceramic (standard deviation)	
Lamp Life	Approximately 500,000 measurements	
Power Supply	Removable battery pack; 7.4 VDC, 2400 mAh	
Measurements per Charge	1,000 measurements within 8 hour period	
Weight	1.05kg (2.32lbs.)	
Screen Display	3.2 inch backlit Colour Graphic LCD	
Dimensions	109 x 91 x 213mm (4.3 x 3.6 x 8.4")	
Packing List	Elcometer 6085 Ci60, calibration standards, calibration certificate for standards, AC adaptor, mains leads (UK & EUR), carry case & operating instructions	
Packing List	Elcometer 6085 Ci62, calibration standards, calibration certificate for standards, AC adaptor, mains leads (UK & EUR), carry case & USB cable, operating instructions	

Accessories

Part Number	Description
KT006085P001	Battery Pack
KT006085P002	External Battery Charger

• Certificate supplied as standard.

†Based on 20 measurements on a white tile