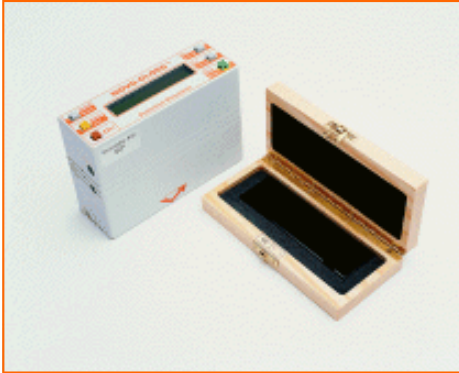


Elcometer 401 & 402 Novo-Gloss™ Glossmeters



Elcometer 401 & 402 Novo-Gloss™ Glossmeters

At a glance

- Simple to use glossmeter available in single, double or triple angle versions.
- Available with or without memory and statistics.
- Continuous measurement mode for variable surfaces.

Can be used in accordance with:	
ASTM 1580-602.2	ASTM D 523
ASTM C 584	ASTM D 2457
ASTM D 1455	BS 3900-D5
BS 6161-12	DIN 67530
ECCA T2	ISO 2813
ISO 7668	

Elcometer 401 & 402 Novo-Gloss™ Glossmeters

Increasingly, specifications and standards require a physical assessment of gloss. Gloss measurement is necessary to monitor the uniformity, compatibility, or possibly the deterioration of any protective gloss finish.

The Elcometer Novo-Gloss™ glossmeter is available in a basic version – the Elcometer 401 – or the statistics version – the Elcometer 402 – which has a memory of up to 999 readings and can be connected to the Elcometer Novo-Soft™ Software for further analysis and archiving. Single dual or triple geometry angle versions are available, from 20° to 85°.

- Auto-ranging from 0 - 1000 Gloss Units allows gloss readings over the entire range from non-reflective surfaces to mirror finish
- Continuous measurements for variable surfaces
- Calibration possible using any standard
- Full traceability to BAM Standards, certificate supplied with each gauge.
- Internal calculation of max, min, mean and coefficient of variation
- Software supplied with all statistics models

Appearance

Appearance measurement is a way of putting numbers to characteristics of surfaces that we see. The ability to independently quantify appearance allows for products to be similar whenever and wherever the product is manufactured or coated.

Elcometer provide a comprehensive range of hand held instruments to measure most of the individual characteristics that generate the overall appearance of a material or coating.

Gloss

The ability of a surface to reflect light without scattering is known as Gloss. Gloss is measured by directing a constant power light beam at an angle to the test surface and then by monitoring the amount of reflected light. Different surfaces require different reflective angles. Elcometer Glossmeters cover the range necessary to measure almost any surface from high gloss to matt, from large to small surfaces - flat or curved

Haze

Some materials appear to have considerable difference in gloss yet give comparable readings when measured with a glossmeter at one angle. These materials can be separated by measuring at a second angle and comparing the difference of the two readings. Haze is defined by ASTM D4039 as the difference between gloss at 60° and the gloss at 20°.

Units Available	Single Angle Units	Dual Angle Units	Triple Angle Units
Geometry	20°, 60°, 85°	20°, 60°	20°, 60°, 85°
Dimensions	150 x 50 x 110mm (6 x 2 x 4.5")		180 x 50 x 110mm (7 x 2 x 4.5")
Memory	up to 999 readings (Elcometer 402 models only)		
Battery	Internal rechargeable battery		
Accuracy	±0.5 Gloss Units		
Repeatability	±0.5 Gloss Units		

Shade

This is the measurement of darkness or lightness of a surface. Only shading is measured, irrespective of colour, and is referred to as 'whiteness'. The test surface is illuminated at an angle of 45° and the intensity of scattered light at the perpendicular (0°), is measured on a grey scale where black is 0% and white is 100%.

Model	Description	Part Number		
		Elcometer 401 Basic Model	Elcometer 402 Statistics Model	
Elcometer 401/402	Novo-Gloss™ 20°	J401--20	J402--20	
Elcometer 401/402	Novo-Gloss™ 60°	J401--60	J402--60	
Elcometer 401/402	Novo-Gloss™ 85°	J401--85	J402--85	
Elcometer 401/402	Novo-Gloss™ 20/60°	J401--26	J402--26	
Elcometer 401/402	Novo-Gloss™ 20/60/85°	J401-268	J402-268	
Please select the appropriate charger from the list below to be supplied with the Elcometer 401 and 402 Glossmeters				
		UK 240V	EUR 220V	US 110V
Accessories	Novo-Gloss™ Charger	T40016344	T40016345	T40016346
	20° Gloss Standard and Certificate	T40016350		
	60° Gloss Standard and Certificate	T40016351		
	85° Gloss Standard and Certificate	T40016352		
	20/60° Gloss Standard and	T40016353		
	20/60/85° Gloss Standard and	T40016354		
Packing List	Elcometer 401: Elcometer 401 Novo-Gloss™ Glossmeter, 2 x Spare lamp assemblies, Battery charger, Certified calibration tile, Protective box for tile, Cleaning cloth for tile, Calibration certificate for tile, Carrying case & Operating instructions			
Other angles are available as well as instruments complying to various standards. Please contact Elcometer for further information and pricing.				

Opacity

This is the degree to which a coating will obscure the surface to which it has been applied. Opacity is measured in a similar way to shade, however opacity, or hiding power, as defined by ISO 2814 involves measuring whiteness of a known film of test material on both a black (less than 5%) and a white (greater than 75%, less than 85%) substrate. A full range of opacity test charts are available – See Leneta Test Charts for further information.

Colour

The ability of a material to absorb certain wavelengths of light and reflect others. For example a black material reflects no light across the complete colour spectrum, whereas a pure white material reflects all of the light. All other colours reflect light at different points of the spectrum. Colour is quantified by the material's Red, Green and Blue (RGB) values.

Related products



Elcometer 6014

The Elcometer 6014 Shade & Opacity Meter is a low-cost dual function reflectometer for measuring shade and opacity using 45/0° geometry.

This 2-in-1 gauge is the perfect choice for any industry that needs to measure the shade and opacity of their products.



Elcometer 406

If you are looking for a small, low cost, very easy to use gauge - the mini gloss meter from Elcometer is the ideal choice. The Elcometer 406 is menu driven, available in 6 languages, and comes with statistics and software as standard.



Elcometer 400

The Elcometer 400 is perhaps the only glossmeter designed specifically for measuring curved surfaces, small components and complex shapes. The continuous reading mode allows the rapid assessment of finish variation and measures a whole range of products and designs.



Elcometer 6012

Designed specifically to measure those materials which appear to have considerable difference in gloss yet give comparable readings when measured with a traditional glossmeter at one angle. Using the Elcometer haze meter, these materials can be separated by measuring at a second angle and comparing the two readings.

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