



www.rhopointinstruments.com



sales@rhpointinstruments.com



RHOPOINT
NOVO-GLOSS™

Novo-Gloss Glossmeters

- 60° Glossmeter
- 20/60/85° Glossmeter
- 45° Glossmeter

Manufactured by Rhopoint Instruments in the United Kingdom



Why measure gloss?



The gloss level of an object is one of the visual attributes used by a consumer to determine whether or not that object is fit for purpose.

Gloss has been defined as 'The attribute of surfaces that causes them to have shiny or lustrous, metallic appearance.'

Manufacturers design their products to have maximum appeal: from highly reflective car body panels to glossy household appliances or matt finish automotive interior trim.

This is especially noticeable where parts may be produced by different manufacturers or factories but will be placed adjacent to one another to create the finished product.

Gloss can also be a measure of the quality of the surface, for instance a drop in the gloss of a coated surface may indicate problems with its cure, leading to other failures such as poor adhesion or lack of protection for the coated surface.

It is important therefore that gloss levels are achieved consistently on every product or across different batches of products.

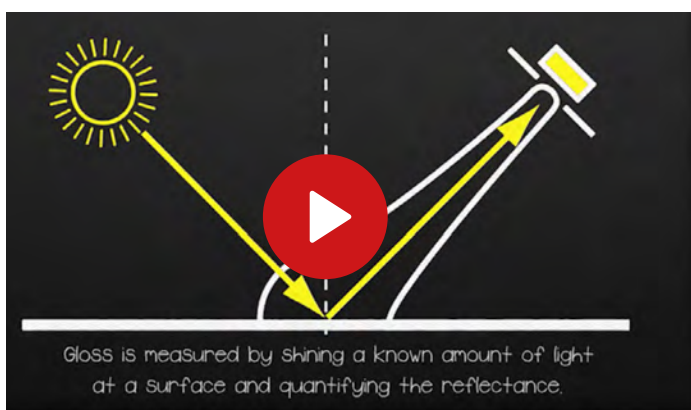


The gloss of a surface can be greatly influenced by a number of factors, for example the smoothness achieved during polishing, the amount and type of coating applied or the quality of the substrate.

It is for these reasons that many manufacturing industries monitor the gloss of their products, from cars, printing and furniture to food, pharmaceuticals and consumer electronics.

How is gloss measured?

Gloss is measured by shining a known amount of light at a surface and quantifying the reflectance.

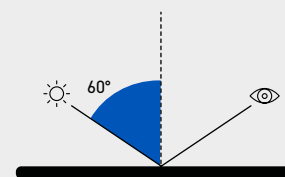


The angle of the light and the method by which the reflectance is measured are determined by the surface material and which aspect of the surface appearance is to be measured.

Which angle should I use for my application?

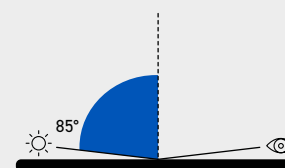
ISO 2813 and ASTM D523 (the most commonly used standards) describe three measurement angles to measure gloss across all surfaces.

Gloss is measured in gloss units (GU) and is traceable to reference standards held at a National Metrology Institute.



Universal Measurement Angle: 60°

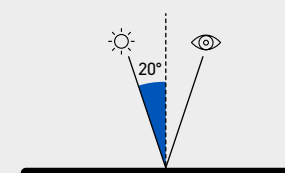
All gloss levels can be measured using the standard measurement angle of 60°. This is used as the reference angle with the complimentary angles of 85° and 20° often used for low and high gloss levels respectively.



Low Gloss: 85°

For improved resolution of low gloss a grazing angle of 85° is used to measure the surface. This angle is recommended for surfaces which measure less than 10GU when measured at 60°.

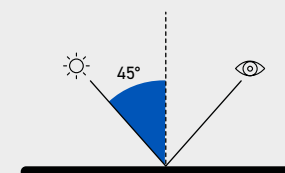
This angle also has a larger measurement spot which will average out differences in the gloss of textured or slightly uneven surfaces.



High Gloss: 20°

The acute measurement angle of 20° gives improved resolution for high gloss surfaces. Surfaces that measure 70GU and above at the standard angle of 60° are often measured with this geometry.

The 20° angle is more sensitive to haze effects that affect the appearance of a surface.



Speciality measuring angle: 45°

This measuring angle is in accordance with the ASTM D2457 standard for the gloss measurement of plastic films and solid plastic parts as well as according to the standard ASTM C346 for the gloss measurement of ceramics

To quantify haze, distinctness of image, reflected image quality and other surface texturing please consider the Rhopoint IQ.



Rhopoint Novo-Gloss range of glossmeters

Single 60°, Single 45° and Trio 20/60/85° for maximum accuracy and resolution in all gloss applications.



Novo-Gloss 60



Novo-Gloss 45



Novo-Gloss Trio

Model	20° Gloss HIGH GLOSS	45° Gloss SPECIALITY ANGLE	60° Gloss ALL GLOSS FINISHES	85° Gloss LOW GLOSS FINISHES	
Novo-Gloss 60	-	-	✓	-	Shop
Novo-Gloss 45	-	✓	-	-	Shop
Novo-Gloss Trio	✓	-	✓	✓	Shop



The Rhopoint Novo-Gloss

Applications



Paints and Coatings



Yacht Manufacturers



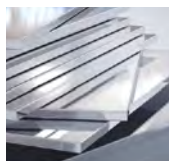
Automotive Re-finish



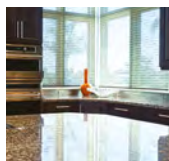
Smart devices, PC & Laptop Covers



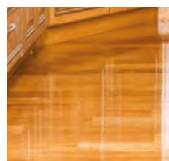
Furniture



Metal Polishers



Polished Stone



Wood Coatings



Automotive



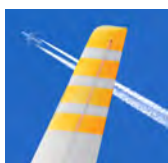
Printed Cartons



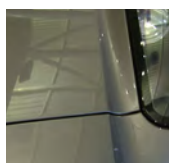
Plastics Industry



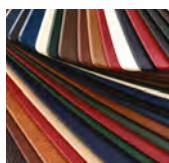
Printing Ink



Aerospace



Detailing



Textile



Powder Coating

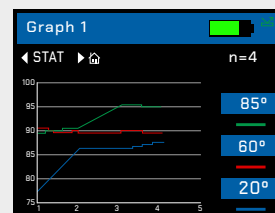
Features

Trigloss			
20°	60°	85°	n=4
87.2	89.6	95.6	
BATCH.003 13/02/2023 13:51			

Measurement
Simultaneous measurement of all parameters in GU or % reflectivity, date and time stamped.

Statistics 1			
20°	60°	85°	n=4
99.3	98.9	98.1	
Max	99.4	99.0	98.1
Min	99.3	98.9	98.1
Max	99.4	99.0	98.1
SD	0.0	0.0	0.0

Statistics
Displays full statistics for the readings in the current batch.



Graphical
Graphical reporting for quick trend analysis.

Trigloss			
20°	60°	85°	n=4
87.2	89.6	95.6	
BATCH.003 13/02/2023 13:51			

Parameters
Pass / fail parameters can be defined for instant identification of non-conformances.

Trigloss			
AUTO MEASURE : 3	20°	60°	85°
Auto Measure.			
System activated			
Press • to stop			
BATCH.004 13/02/2023 17:03			

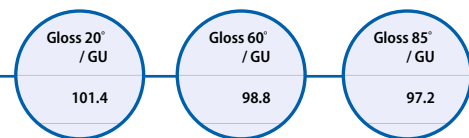
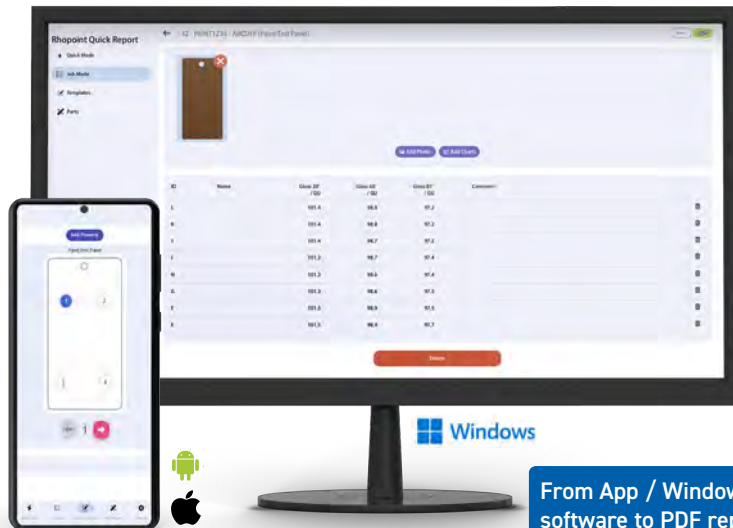
Automatic Measurement
Automatic measurements at pre-defined intervals for easy checking of large surface areas.

Setup			
BACK			
Memory : ON (97% free)			
Delete last reading			
Start new batch			
Delete current batch			
Delete all batches			
Auto batch : OFF			
Batch size : 10			
Batch name : BATCH			

Batch Names
User definable batch names and batch sizes for quicker and more efficient reporting.

The Rhopoint Quick Report App

The Quick Report App from Rhopoint is a quick and easy to use reporting package designed to enhance the functionality & reporting capabilities of the Novo-Gloss gloss meters.



Values for all measured parameters given per measurement spot

From App / Windows software to PDF report



- 1 Configure a template of your sample to be tested and add measurement spots.
- 2 Make measurements directly into the app.

ID	Device	Spot #	Gloss 20° /GU	Gloss 60° /GU	Gloss 85° /GU	Comment
A	Novo-Gloss	1	98.2	97.5	99.5	—
B	Novo-Gloss	1	98.2	97.5	99.5	—
C	Novo-Gloss	1	98.1	97.5	99.4	—
D	Novo-Gloss	2	98.2	97.5	99.5	—
E	Novo-Gloss	2	98.1	97.5	99.5	—
F	Novo-Gloss	2	98.1	97.4	99.4	—
G	Novo-Gloss	3	98.1	97.5	99.4	—
H	Novo-Gloss	3	98.1	97.4	99.4	—
I	Novo-Gloss	3	98.1	97.4	99.4	—

- ✓ Simplify data collection & processing.
- ✓ Create custom templates.
- ✓ Add images.
- ✓ Create branded reports.



↓ app.rhopointinstruments.com

- 3 Readings are transferred from the measurement device to the app via Bluetooth allowing customised PDF reports to be easily generated.

The app will work on Android, iOS and a PC using web browser or application installation.

Specifications

20° Gloss

Range (GU)	0-100	100-2000
Repeatability	0.2 (GU)	0.2%
Reproducibility	0.5 (GU)	0.5%*
Resolution (GU)	0.1	
Measurement Area	6.0 x 6.4 (mm)	
Standards	ISO 2813 ASTM D523 ISO 7668 ASTM D2457	DIN 67530 JIS Z 8741

Recommended product

• [Novo-Gloss Trio](#)

45° Gloss

Range (GU)	0-60	60-1000
Repeatability	0.2 (GU)	0.2%
Reproducibility	0.5 (GU)	0.5%*
Resolution (GU)	0.1	
Measurement Area	8 x 12mm ellipse	
Standards	ASTM D2457 ASTM C346	

Recommended product

• [Novo-Gloss 45](#)

60° Gloss

Range (GU)	0-10	10-100	100-1000
Repeatability	0.1 (GU)	0.2 (GU)	0.2%
Reproducibility	0.2 (GU)	0.5 (GU)	0.5%*
Resolution (GU)	0.1		
Measurement Area	6.0 x 12.0 (mm)		
Standards	ISO 2813 ASTM D523 ISO 7668	ASTM D2457 DIN 67530 JIS Z 8741	

Recommended product

• [Novo-Gloss 60](#)
• [Novo-Gloss Trio](#)

85° Gloss

Range (GU)	0-100	100-199
Repeatability	0.2 (GU)	0.2%
Reproducibility	0.5 (GU)	0.5%*
Resolution (GU)	0.1	
Measurement Area	4.4 x 44.0 (mm)	
Standards	ISO 2813 ASTM D523 ISO 7668	ASTM D2457 DIN 67530 JIS Z 8741

Recommended product

• [Novo-Gloss Trio](#)

* A mirror gloss calibration standard is required to achieve this reproducibility

Specifications

Instrument Information

Battery Type	Rechargeable lithium ion
Operation (hours)	17+
Readings per charge	20,000+
Memory	8MB, 2,000 readings
Operating Temperature	15-40°C (60-104°F)
Operating Humidity	Up to 85%, non condensing
Commodity Code	9027 5000

Dimensions & Weights

Dimensions	65mm x 140mm x 50mm (H x W x D)
Weight	390g
Packed weight	1.6kg
Packed dimensions	110mm x 280mm x 220mm (H x W x D)

Included Accessories

Certificates	Instrument calibration certificate ISO 17025* tile calibration certificate
Cables	USB data & mains cable
Calibration standard	High gloss calibration standard with cleaning cloth
Wrist strap	

Order Codes

Novo-Gloss 60	A4000-008
Novo-Gloss Trio 20/60/85	A4000-006
Novo-Gloss 45	A4000-011
Mirror gloss calibration standard	B6000-101
Protective travel case	M1000-016

Free extended 2 year warranty:

Requires registration at www.rhopointinstruments.com within 28 days of purchase.
Without registration, 1 year standard warranty applies.

Calibration and service:

Fast and economic service via our global network of accredited calibration and service centres. Please visit www.rhopointinstruments.com for detailed information.

Languages:



*ISO17025 is applicable for angles 20/60/85 not 45°



Included case with accessories



Protective travel case (optional)



TRY BEFORE YOU BUY

We offer three options for you to try out the Novo-Gloss Glossmeters before buying

- 1 Online demonstration:** Online presentation of the Rhopoint Novo-Gloss with your samples measured LIVE on Microsoft Teams. Includes a consultation with an application specialist.
- 2 Factory sample testing:** Send in samples of your material for testing and receive a comprehensive test report.
- 3 Test on premises:** Ask us for a live demonstration and test of the device at your premises (not available in all regions).

[Arrange a demo](#)

Ready to receive a quote?

[Click here](#)

Rhopoint Instruments Ltd
(Asia, Africa, Middle East, Oceania, UK)

T: +44 (0)1424 739 622
E: sales@rhopointinstruments.com
www.rhopointinstruments.com

Rhopoint Americas Inc.
(North, Central and South America)

T: 1.248.850.7171
E: sales@rhopointamericas.com
www.rhopointamericas.com

Rhopoint Instruments GmbH
(Europe)

T: +49 8020 9214-988
E: info@rhopointinstruments.de
www.rhopointinstruments.de