RHOPOINT
INSTRUMENTS

RHOPOINT
NOVO-GLOSS

www.rhopointinstruments.com

RHOPOINT
NOVO-GLOSS™

- 60° • 20/60° • 20/60/85° GLOSSMETER
- Lightweight and portable
- Fully featured instrument
- Bluetooth data transfer

RHOPOINT
NOVO-GLOSS™

INTRODUCING THE NOVO-GLOSS SINGLE, DUAL AND TRIGLOSS GLOSSMETERS

GLOSS measurements are fully compatible with existing Novo-Gloss Lite and Micro-TRI-gloss results. Single 60°, Dualgloss 20/60° or Trigloss 20/60/85° versions are for maximum accuracy and resolution in all gloss applications.

IMPROVED PERFORMANCE IN ALL GLOSS APPLICATIONS

THE ULTIMATE GLOSSMETER

WHY MEASURE GLOSS?

Gloss is an aspect of the visual perception of objects that is as important as colour when considering the psychological impact of products on a consumer.

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

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.

Manufacturers design their products to have maximum appeal: highly reflective car body panels, gloss magazine covers or satin black designer furniture.

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

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 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 surface and also aspect of the surface appearance 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 **BAM** (Germany), **NRC** (Canada) or **NPL** (UK).

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 60º.

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.

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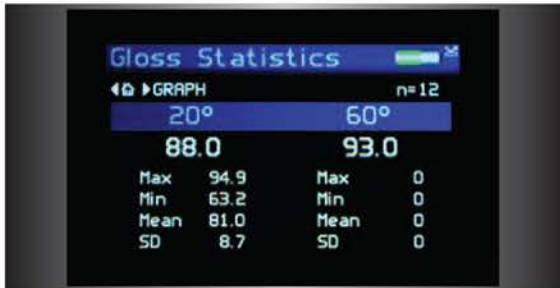
THE ULTIMATE GLOSSMETER
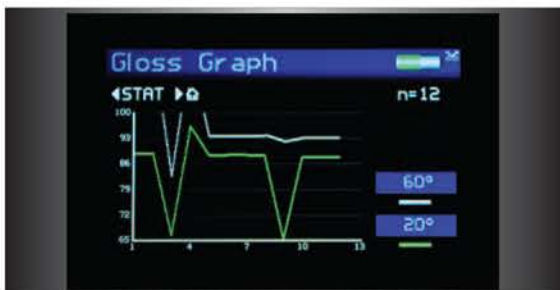
FEATURES

Measurement

Fast measurement of all parameters. Full on-board statistics with graphical trend analysis and reporting.

Simultaneous measurement of all parameters, results are date and time stamped.

Displays full statistics for the number of readings in the current batch.

Graphical reporting for quick trend analysis.

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

Easy Batching

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

Rapid data transfer

Software-free data transfer

USB connection to PC instantly recognises the device as a drive location which facilitates the quick transfer of files using Windows Explorer or similar.

Direct data input via Bluetooth

Instantly transmit measured readings directly to programs such as MS Excel on your PC / tablet / smartphone to greatly simplify the reporting process.

	1	2	3	4	5	6
DATE	22/02/2013	22/02/2013	22/02/2013	22/02/2013	22/02/2013	22/02/2013
TIME	11:16:24	11:16:42	11:17:17	11:17:37	11:17:58	11:18:19
20°	30.8	32.3	28.4	35.1	34.6	28
60°	70.1	71.8	68.3	73.8	73.2	68.3
85°	88.9	89.1	87.8	90.4	90.4	87.5
Calibrated	22/02/2013	22/02/2013	22/02/2013	22/02/2013	22/02/2013	22/02/2013
Serviced	19/02/2013	19/02/2013	19/02/2013	19/02/2013	19/02/2013	19/02/2013
S/N	2000728	2000728	2000728	2000728	2000728	2000728

Power

10,000+ readings per charge

The instrument is rechargeable via USB/PC or mains.

THE ULTIMATE GLOSSMETER

SAMPLE APPLICATIONS

Paints and Coatings

Printing Ink

Powder Coating

Plastics Industry

Automotive Re-finish

Furniture

Metal Polishers

Polished Stone

Wood Coatings

Automotive

Smartphone, Tablet PC and Laptop Covers

Automotive Coatings

Yacht Manufacturers

SPECIFICATIONS

GLOSS

60°, 20/60° and 20/60/85°* versions available

20°	Improved accuracy and resolution on high gloss & metallic samples (>70GU when measured at 60°)
60°	Universal angle – all gloss levels
85°	Improved resolution for matt finishes (<10GU when measured at 60°)

Resolution 0.1GU • Repeatability ±0.2GU • Reproducibility ±0.5GU

Measurement range:
20°: 0-2000GU
60°: 0-1000GU
85°: 0-199GU

Standards:
ISO 2813, ISO 7668
ASTM D523, ASTM D2457
DIN 67530
JIS 8741, JIS K 5600-4-7

*Verified performance on 20° angle for 20/60/85°

GLOSS CALIBRATION STANDARD

Traceability: BAM traceable

Uncertainty: 1.1GU

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NOVO-GLOSS

INSTRUMENT SPECIFICATIONS

Operation
- Full colour easy to read screen
- Adjustable brightness
- 6 button touch sensitive interface

Construction
- Integrated calibration holder with in-position detector for error free calibration

Measurement
- Single button push to measure all parameters
- Fast measurement
- Results batching with user definable names

Statistical Analysis
- Max, min, mean, S.D.

Graphical Analysis
- On board trend analysis
- Gloss values

Power
- Rechargeable lithium ion
- 17+ hours operation
- 10,000+ readings per charge

Memory
- 8MB= >2000 readings
- User defineable alphanumeric batching

Data Transfer
- Bluetooth
- PC compatible
- USB connection, no software install required

Measurement Area
- 20°: 6mm x 6.4mm
- 60°: 6mm x 12mm
- 85°: 4.4mm x 44mm

- Operating Temperature: 15 - 40 ° C (60 - 104 ° F)
- Humidity: Up to 85%, non condensing

Dimensions & Weight
- 65mm x 140mm x 50mm (H x W x D)
- 60° & 20/60° = 390g, 20/60/85° = 530g
- Packed weight: 1.6kg
- Packed dimensions: 110mm x 280mm x 220mm (H x W x D)
- Commodity code: 9027 5000

Languages

INCLUDED ACCESSORIES

- Certified calibration tile with certificate
- USB data cable
- Wrist strap
- Mini CD
    - Instruction manual
    - Bluetooth data app
    - Example Excel spreadsheets
- Instructional videos

EXTRAS

FREE EXTENDED WARRANTY

FREE LIGHT SOURCE WARRANTY

Guaranteed for the life of the instrument

CALIBRATION AND SERVICE

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

BCF
Associate
BRITISH COATINGS FEDERATION

bsi.

UKAS

Pra
PAINT RESEARCH ASSOCIATION
MEMBER

Certificate no: FM 29741
ISO 9001:2008

LOCAL AGENT

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