

[www.rhpointinstruments.com](http://www.rhpointinstruments.com)

## RHOPOINT FLEX NOVO-GLOSS

- | Measures small footprint areas
- | Measure curved and hard to reach surfaces
- | On board statistics, Bluetooth and USB data transfer
- | Enhanced accuracy measurement of low gloss finishes



Designed specifically to measure the gloss of surfaces that cannot be measured using traditional glossmeters, the Novo-Gloss Flex 60 Glossmeter combines the functionality and reporting of an advanced glossmeter with an ultra lightweight remote measuring head.

The Novo-Gloss Flex 60 has been designed specifically to measure low gloss surfaces. It features an additional measuring scale with a resolution 10 times greater than standard glossmeters.

This increased resolution gives a far superior level of control of surface finish.

The Novo-Gloss Flex 60 complies to ISO 2813 and measurements made with the instrument are compatible with traditional glossmeters complying to these standards.





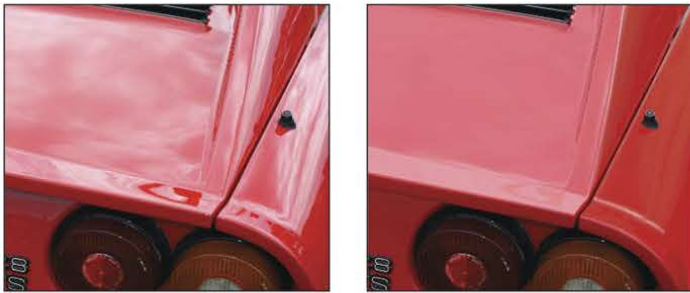
## WHY MEASURE GLOSS?

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.



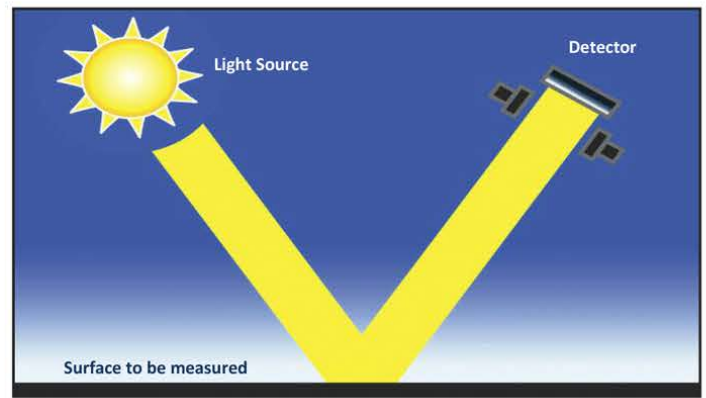
It is important therefore that gloss levels are achieved consistently on every product or across different batches of products.

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.



The unit of measurement for gloss is the Gloss Unit (GU) and the measurement scale at 60degrees is 0-1000GU where 0 = a completely matt surface and 1000 = a perfect mirror.

The Novo-Gloss Flex 60 has a measurement range of 0-125 GU and can measure anything from matt surfaces to high gloss finishes typically seen in the automotive industry.

The additional measuring range of GUh provides a x10 resolution when measuring very low gloss surfaces of 0-12 GU.



*Matt finish*



*High gloss finish*

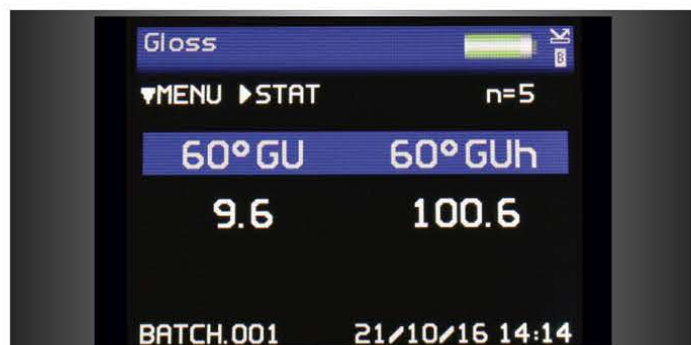
For measurement of gloss, haze and DOI (Distinctness of image) of mid to high gloss surfaces at 20°, please refer to the Rhopoint IQ Flex 20.



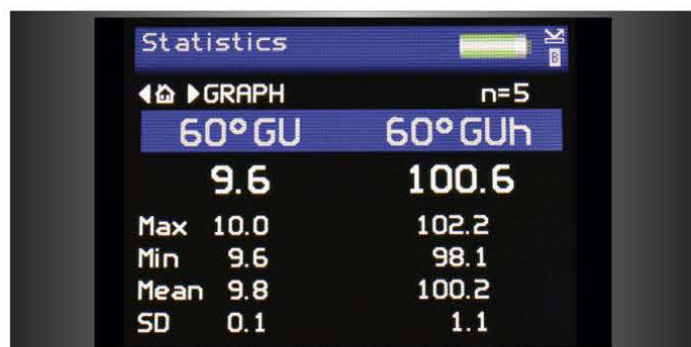
## FEATURES

### Measurement

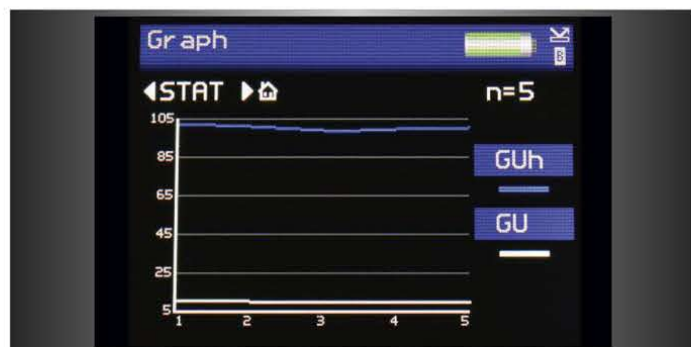
Fast measurement of all parameters. Full on-board statistics with graphical trend analysis and reporting.



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.

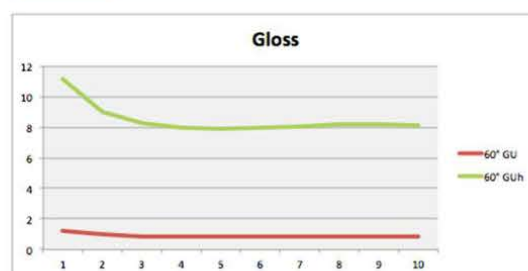
USB connection to PC instantly recognises the device as a drive location which facilitates the quick transfer of files using Windows Explorer or similar.

### Direct data input via BT wireless



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

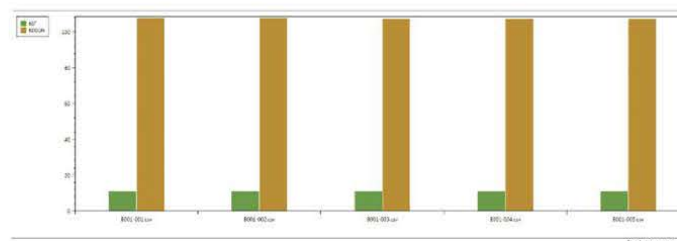
	1	2	3	4	5	6
DATE	31/10/2016	31/10/2016	31/10/2016	31/10/2016	31/10/2016	31/10/2016
TIME	15:17:37	15:17:39	15:17:42	15:17:44	15:17:47	15:17:50
PASS/FAIL	N/A	N/A	N/A	N/A	N/A	N/A
60° GU	1.22	0.97	0.84	0.82	0.82	0.82
60° GUh	11.14	8.99	8.29	8	7.88	7.97
Calibrated	31/10/2016	31/10/2016	31/10/2016	31/10/2016	31/10/2016	31/10/2016
Serviced	31/10/2016	31/10/2016	31/10/2016	31/10/2016	31/10/2016	31/10/2016
S/N	9001004	9001004	9001004	9001004	9001004	9001004



### Novo-Gloss Multi Gauge Software

Analyse and compare individual measurements made with the instrument

	0001-001.csv	0001-002.csv	0001-003.csv	0001-004.csv	0001-005.csv	Avg	Min	Max	σ
DeviceDate	2016-11-10	2016-11-10	2016-11-10	2016-11-10	2016-11-10				
DeviceTime	14:49:56	14:49:58	14:49:59	14:50:00	14:50:01				
Pass/Fail	N/A	N/A	N/A	N/A	N/A				
60°	10.99 →	10.99 →	10.99 →	10.99 →	10.99 →	10.99	10.99	10.99	0.00
60° GUh	107.71 ↑	107.6 ↑	107.28 ↓	107.17 ↓	107.28 ↓	107.41	107.17	107.71	0.21
S/N	9001036	9001036	9001036	9001036	9001036				





## INSTRUMENT CALIBRATION

The Novo-Gloss Flex 60 is supplied with 2 calibration standards for low and high gloss which gives increased accuracy and resolution for low gloss surfaces.



The calibration standards are magnetically enclosed which offers superior protection from contamination.



The standards are magnetically attached to the instrument measuring head to ensure repeatable calibration.



## MEASUREMENT HEAD

The instrument is supplied with interchangeable measurement adaptors.

1. Standard adaptor
2. Steel surface adaptor (magnetic) for increased repeatability for ferrous materials.



Both adaptors can be replaced if they are damaged.

The measuring head is ultra lightweight with integrated measurement buttons for single handed operation.

## SAMPLE APPLICATIONS



**Curved plastic parts**



**Plastics industry**



**Automotive interior trim**



**Furniture**



*Measurement of curved matt surface*

## SPECIFICATIONS

**60°**

Universal angle – all gloss levels

**GUh**

Improved resolution for low gloss finishes

	<b>GU</b>	<b>GUh</b>
Measurement range:	0-125 GU	0 -125 GUh (0-12.5 GU)
Resolution:	0.1 GU	0.1 GUh (0.01 GU)
Repeatability:	±0.2 GU	±0.5 GUh (0.05 GU)
Reproducibility:	±0.5 GU	±2.0 GUh (0.2 GU)

**Standards:**

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

## INSTRUMENT SPECIFICATIONS

### Operation

- Full colour easy to read screen
- Adjustable brightness
- 6 button touch sensitive interface with measurement buttons on the head unit

### Construction

- Integrated calibration holders for error free calibration

### Measurement

- Fast measurement
- Results batching with user definable names

### Statistical Analysis

- Max, min, mean, S.D.

### Graphical Analysis

- On board trend analysis

### Power

- Rechargeable lithium ion
- 17+ hours operation
- 14,000 readings per charge

### Memory

- 8MB= 2950 readings
- User defineable alphanumeric batching

### Data Transfer

- Bluetooth
- PC compatible
- USB connection, no software installation required
- Novo-Gloss MultiGauge analysis software

### Measurement Area

- 60°: 6mm x 12mm
- Operating Temperature: 15 - 40° C (60 - 104° F)
- Humidity: Up to 85%, non condensing

### Dimensions & Weight

- Instrument: 80 x 150 x 35mm (H x W x D), 392g
- Measurement head: 60 x 110 x 28mm (H x W x D), 109g
- Packed weight: 1.6kg
- Packed dimensions: 110 x 280 x 220mm (H x W x D)
- Commodity code: 9027 5000

### Languages



## INCLUDED ACCESSORIES

- Certified high and low gloss calibration tiles with certificates
- Standard and steel surface measuring head adaptors
- USB data cable
- Wrist strap
- USB/mains charger
- Cleaning cloth
- USB memory stick containing:
  - Novo-Gloss Multigauge software
  - Instruction manual
  - Bluetooth data app
  - Example Excel spreadsheets
  - Instrument calibration certificate

## EXTRAS

### FREE EXTENDED WARRANTY

### FREE LIGHT SOURCE WARRANTY

Guaranteed for the life of the instrument

### CALIBRATION AND SERVICE

Fast and economical service via our global network of accredited calibration and service centres. Please visit [www.rhopointinstruments.com/support](http://www.rhopointinstruments.com/support) for detailed information.



Certificate no: FM 29741  
ISO 9001:2008



### LOCAL AGENT



#### PT. DAINAN 2 INDONESIA

The City Resort Residences, Rukan Miami Bay B-7  
Jl. Kamal Outer Ring Road, Cengkareng, Jakarta Barat 11730  
Ph. (021) 56955697, 29032220, 29038709, 29038710  
Fax. (021) 29020533  
[www.dainan2indonesia.com](http://www.dainan2indonesia.com) • [www.ukurwarna.com](http://www.ukurwarna.com)

00620b/01/17