

**NEURTEK**

instruments



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

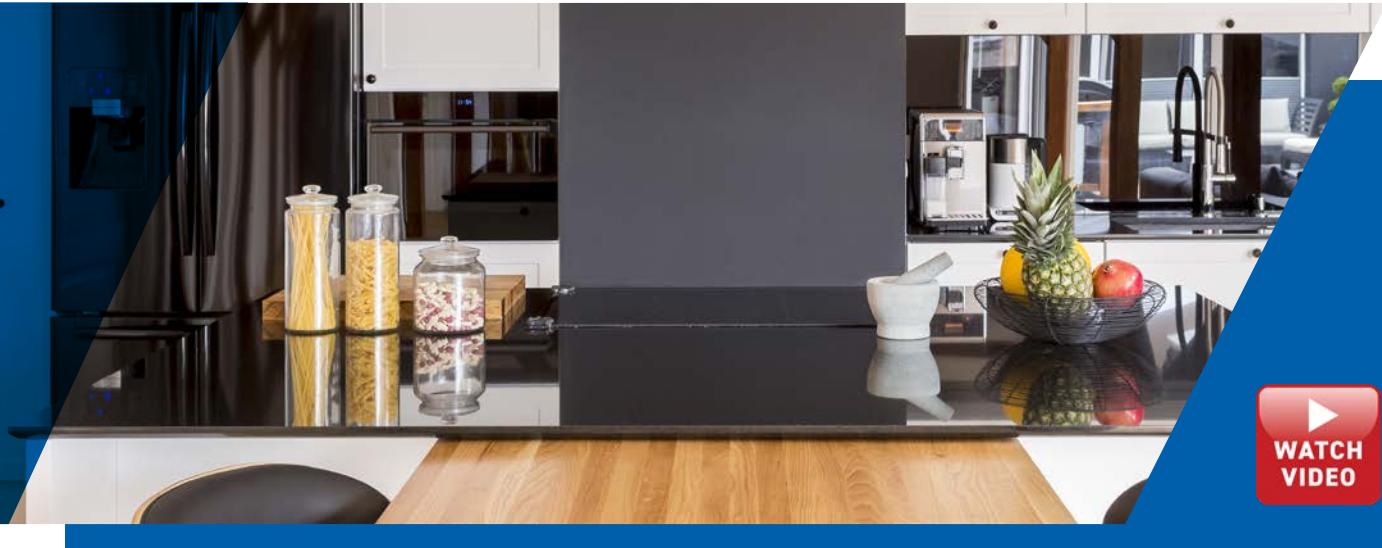
 [info@neurtek.com](mailto:info@neurtek.com)



### NK Novo-Gloss Glossmeters

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

# 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.

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.

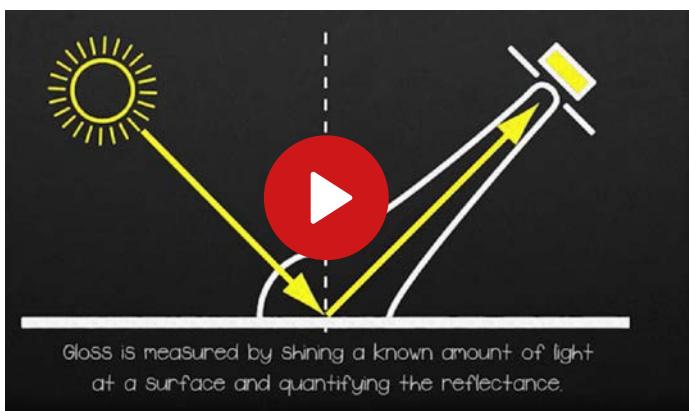


The gloss of a surface can be greatly influenced by a number of factors, for example the smoothness achieved during polishing, the amount and type of coating applied or the quality of the substrate.

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

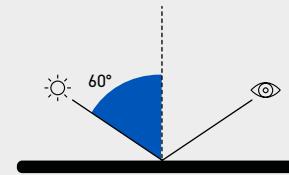


The angle of the light and the method by which the reflectance is measured are determined by the surface material and which aspect of the surface appearance is to be measured.

## Which angle should I use for my application?

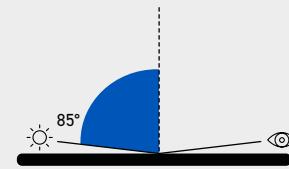
ISO 2813 and ASTM D523 (the most commonly used standards) describe three measurement angles to measure gloss across all surfaces.

Gloss is measured in gloss units (GU) and is traceable to reference standards held at NIST (USA).



### Universal Measurement Angle: 60°

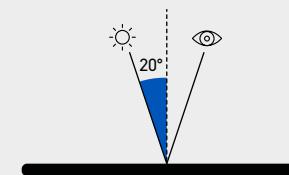
All gloss levels can be measured using the standard measurement angle of 60°. This is used as the reference angle with the complimentary angles of 85° and 20° often used for low and high gloss levels respectively.



### 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.

# Rhopoint NK Novo-Gloss

## Glossmeter Range

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



NK Novo-Gloss Trio



NK Novo-Gloss 60

Model	20° Gloss HIGH GLOSS	60° Gloss ALL GLOSSY FINISHES	85° Gloss LOW GLOSS FINISHES	
NK Novo-Gloss 60	-	✓	-	<a href="#">SHOP</a>
NK Novo-Gloss Trio	✓	✓	✓	<a href="#">SHOP</a>



# Rhopoint NK Novo-Gloss

## Applications



Paints and Coatings



Yacht Manufacturers



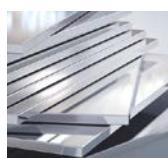
Automotive Re-finish



Smart devices, PC & Laptop Covers



Furniture



Metal Polishers



Polished Stone



Wood Coatings



Automotive



Printed Cartons



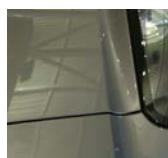
Plastics Industry



Printing Ink



Aerospace



Detailing



Textile



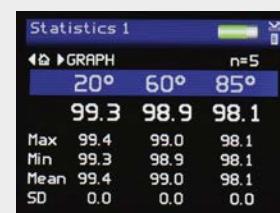
Powder Coating

## Features



### Measurement

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



### Statistics

Displays full statistics for the readings in the current batch.



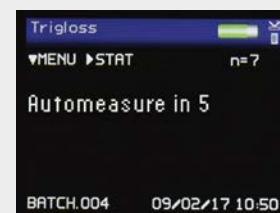
### Graphical

Graphical reporting for quick trend analysis.



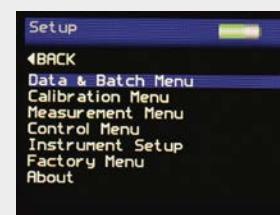
### Parameters

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



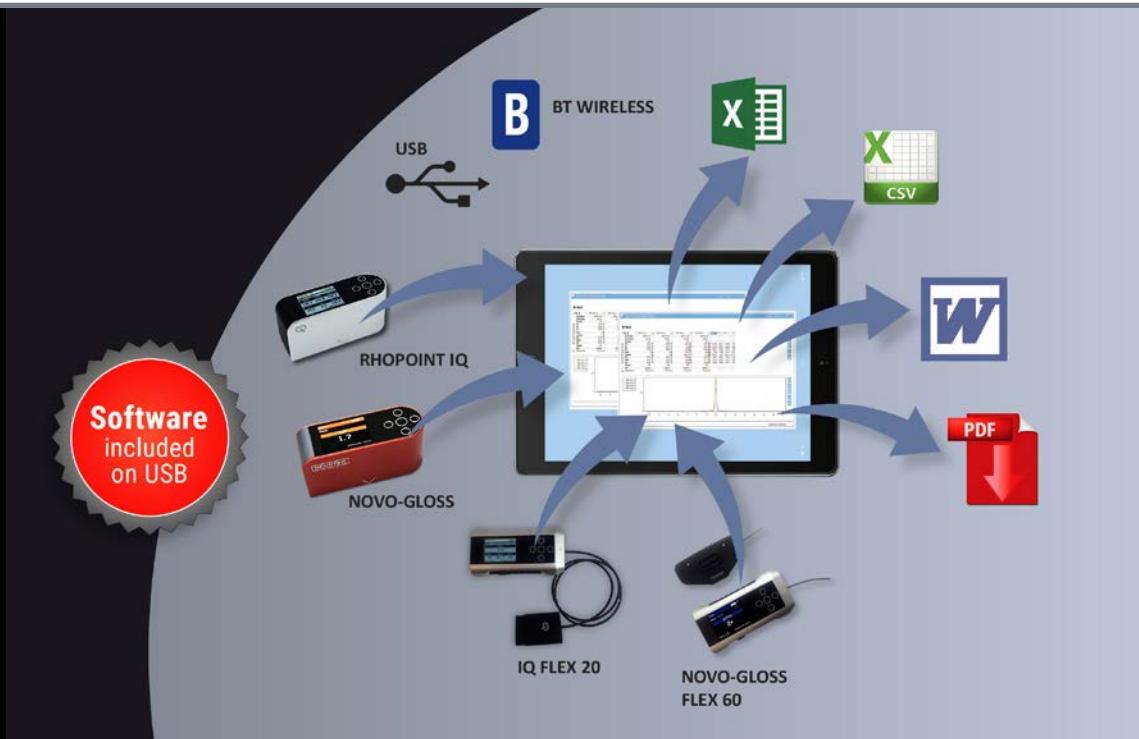
### Automatic Measurement

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



### Batch Names

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



# Data analysis and transfer

## Software-free data transfer

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



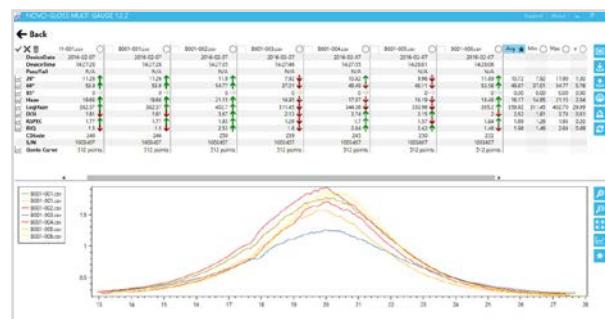
## Direct data input via BT wireless

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



## Statistical analysis via Novo-Gloss Multi Gauge software

The included software provides an easy means to measure, import and compare data and export the measurements into several other file formats, e.g. PDF, Excel® or CSV.



View and inspect data saved on the instrument.

# Specifications

## 20° Gloss

Range	0-100	100-2000
Repeatability	0.2 GU	0.2%
Reproducibility	0.5 GU	0.5%*
Resolution	0.1	
Measurement Area		6mm x 6.4mm
Standards	ISO 2813 ASTM D523 ISO 7668 ASTM D2457 IN 67530 JIS Z 8741	

## 45° Gloss

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

## 60° Gloss

Range	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	0.1		
Measurement Area		6mm x 12mm	
Standards	ISO 2813 ASTM D523 ISO 7668 ASTM D2457 IN 67530 JIS Z 8741		

## 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		4.4mm x 44mm
Standards	ISO 2813 ASTM D523 ISO 7668 ASTM D2457 IN 67530 JIS Z 8741	

## Haze

Range	0-500 Log HU
Repeatability	1 Log HU
Reproducibility	10 Log HU
Resolution	0.1
Measurement Area	6.0mm x 6.4mm
Standards	ASTM E430 ASTM D4039

	20° Gloss	45° Gloss	60° Gloss	85° Gloss	Haze
<u>NK Novo-Gloss 45</u>		✓			
<u>NK Novo-Gloss 60</u>			✓		
<u>NK Novo-Gloss Trio</u>	✓		✓	✓	
<u>NK Novo-Gloss with Haze to ATSM E430</u>	✓		✓	✓	✓

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

# Specifications

<b>Battery Type</b>	Rechargeable lithium ion
<b>Operation</b>	17+ hours
<b>Readings per charge</b>	20.000+
<b>Memory</b>	8MB, 2,000 readings
<b>Operating Temperature</b>	15-40°C (60-104°F)
<b>Operating Humidity</b>	Up to 85%, non condensing
<b>Commodity Code</b>	9027 5000

## Dimensions & Weights

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

## Order Codes

<b>Novo-Gloss 60</b>	A4000-008
<b>Novo-Gloss Trio 20/60/85</b>	A4000-006
<b>Novo-Gloss 20/60/85 with Haze</b>	A4000-009
<b>Novo-Gloss 45</b>	A4000-011
<b>Mirror gloss calibration standard</b>	B6000-101

### Free extended 2 year warranty:

Requires registration at [www.rhopointinstruments.com](http://www.rhopointinstruments.com) within 28 days of purchase. Without registration, 1 year standard warranty applies.

### 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](http://www.rhopointinstruments.com) for detailed information.

### Languages:



## Included accessories

- Certified calibration tile with certificate
- USB data cable
- Wrist strap
- Novo-Gloss Multi Gauge software
- Instructional videos
- USB data stick
  - Instruction manual
  - BT wireless data app
  - Example Excel spreadsheets

