micro-gloss



The new intelligence in gloss measurement

The micro-gloss has been the unsurpassed industry standard in gloss measurement for many years. It is the only glossmeter combining the highest accuracy, ease-of-use and multiple functionality - essential for today`s testing requirements. In addition, the smart-chart software is the ideal tool for smart communication with professional documentation and efficient data analysis.

Brilliant color display: easy to read - easy to use

Ergonomics and easy handling were the main focus for the design. The micro-gloss is not too large and not too small - it feels just right in your hand. The scroll wheel operation and new color display with an easy-to-navigate menu make gloss measurement easier than ever before.

Auto diagnosis: Standard OK - Calibration OK

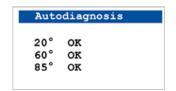
Accurate readings require reliable calibration. The gloss meter and calibration holder make a perfect couple - the calibration standard is always protected in the holder of the micro-gloss. The intelligent auto diagnosis of the gloss meter is a unique feature which quarantees long-term calibration stability and tells

The intelligent auto diagnosis of the gloss meter is a unique feature which guarantees long-term calibration stability and tells you when to calibrate. It even checks whether the standard is clean. Operator friendly. Safe.









Gloss of paint or metal - from matte to mirror gloss

With the micro-gloss gloss meter you can measure any material - paints, plastics or brightened metals. Its expanded range measures from very matte to mirror like reflection of up to 2000 gloss units, automatically and without additional calibration. Always reliable results – according to international standards.

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Smart functions for any task

Different tasks require different tools. The easy to turn scroll wheel of the glossmeter quickly shows you all needed functions - even without a PC:

The **Basic mode** is your tool to quickly check the gloss of a few samples.

The Statistic mode not only shows the average, but all statistical data needed to judge whether the measured difference is significant or how uniform the surface gloss is on your sample. You define what you want to see: mean, standard deviation, range, min/max, ...

The **Difference mode** allows you to define a reference with Pass/ Fail limits and will compare all of the following measurements to the selected reference. The Pass/ Fail indication is colorfully shown on the high resolution display – ideal for production control.

The **Continuous mode** is the most efficient way to quickly check the uniformity of a large sample surface. You define the measurement interval and are now ready to continuously measure the gloss by sliding the micro-gloss over the surface. When finished, the average with min - max range are displayed.

Fast and professional documentation

No matter how harsh your production conditions are or how tight your limits may be, accuracy and reliability of the micro-gloss are proven by thousands of users to guarantee always the highest quality.

The long-term stable LED light source of the glossmeter provides not only highly repeatable results for many years, but also will never burn out. A 10 year warranty on the lamp life is guaranteed.

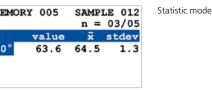
Due to advanced temperature control, the micro-gloss assures the highest stability of the gloss readings - if you are in the lab or move to a "hot spot" on the line.

Our patented calibration procedure during the production of the glossmeters enables an excellent inter-instrument agreement. No matter how far your customer may be away, if he is one of the thousands of micro-gloss users, he will read the same values as you.

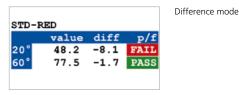


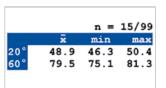


| MEMOR | RY 005 | SAMPLI n = 0 | E 012 |
|-------|--------|-----------------|-------|
| | value | x s | tdev |
| 60° | 63.6 | 64.5 | 1.3 |
| | | | |
| | | | |



Continuous mode

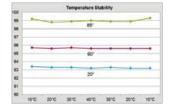












smart-chart



The smart way to communicate



smart-lab

smart-lab Gloss

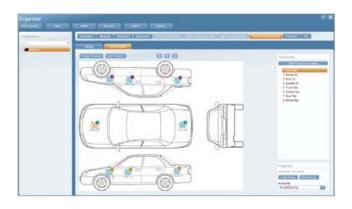
- Measure your products offline or online and transfer the results to smart-lab Gloss. Immediately, you will get a professional QC-report, including data table and graph.
- Setup your product specifications in the Standard Management module, with Pass - Warning - Fail limits for display in your QC-reports.
- Manage your lab work in projects to show production process stability using trend reports.



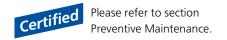


smart-process Gloss

- Ideal for products with multiple measurement locations.
- Setup Organizers for menu guided test sequences and clear sample identification.
- Efficient QC analysis for process control with a high sampling rate. The data are saved in a SQL database which allows handling of large data sets over a long time period.
- Flexible data analysis based on defined identification parameters for a certain time range. Monitor your process stability with scorecards, trend reports and SPC charts (box plot).







In compliance with:

| Standa | Standards | |
|--------|---------------|--|
| ISO | 2813, 7668 | |
| ASTM | D 523, D 2457 | |
| DIN | 67530 | |
| JIS | Z 8741 | |

Ordering Information

| Cat. No. | Description |
|----------|----------------------|
| 4560 | micro-gloss 20° |
| 4561 | micro-gloss 60° |
| 4562 | micro-gloss 85° |
| 4563 | micro-TRI-gloss |
| 4564 | micro-TRI-gloss µ |
| 4565 | micro-gloss 60° S |
| 4566 | micro-TRI-gloss S |
| 4567 | micro-gloss 45° |
| 4568 | micro-gloss 75° |
| 4569 | micro-gloss 60° XS |
| 4570 | micro-gloss 60° XS-S |

Comes complete with:

Glossmeter

Holder with integrated calibration tile

Traceable certificate

USB-cable, Battery Operating manual

Carrying case

Software for download:

smart-lab Gloss or smart-process Gloss with 2 licenses

Note: After software download both software packages

can be used for 30 day free trial.

Thereafter, the user needs to decide and register

for one software package.

Extended Warranty: see pages about Technical Service

System Requirements:

Operating system: Windows® 7 SP1 or 8.1

Microsoft® . NET Framework 4

Hardware: Core 2 Duo, 2.2 GHz, i7 recommended or equivalent

Memory: 4 GB RAM, 8 GB recommended

Hard-disc capacity: min. 300 MB

Monitor resolution: 1280 x 1024 pixel or higher

Interface: free USB-port

| Technical Specification | าร |
|-------------------------|----|
|-------------------------|----|

| ons | |
|--------------------------|--|
| Application | Measuring Area |
| high gloss | 10 x 10 mm (0.4 x 0.4 in) |
| semi gloss | 9 x 15 mm (0.35 x 0.6 in) |
| low gloss | 5 x 38 mm (0.2 x 1.5 in) |
| universal | see single angle |
| universal | see single angle |
| semi gloss | 9 x 15 mm (0.35 x 0.6 in) |
| universal | see single angle |
| Ceramic, Plastic, Film | 9 x 13 mm (0.35 x 0.5 in) |
| Paper, Vinyl Siding | 7 x 24 mm (0.3 x 0.95 in) |
| semi gloss | 2 x 4 mm (0.08 x 0.16 in) |
| semi gloss | 2 x 4 mm (0.08 x 0.16 in) |
| 0 - 100 GU | 100 - 2000 GU |
| ± 0.2 GU | ± 0.2 % |
| ± 0.5 GU | ± 0.5 % |
| CIE standard observer fo | r illuminant CIE-C |
| 0.5 seconds / geometry | |
| | |
| Fe: magnetic, NFe: non-r | nagnetic |
| 0 - 500 Mm (0 - 20 mils) | |
| ± (1.5 Mm +2% of meas | ured value) |
| 999 readings with date a | and time |
| USB | |
| one 1.5V AA Alkaline Bat | ttery 4,000 readings |
| or via USB-port | |
| 155 x 73 x 48 mm (6.1 x | 2.9 x 1.9 in) |
| 0.4 kg (0.9 lbs) | |
| 15 - 40 °C (60 - 104 °F) | |
| up to 85 %, non-conden | sing |
| | |
| | Application high gloss semi gloss low gloss universal universal semi gloss universal Semi gloss universal Ceramic, Plastic, Film Paper, Vinyl Siding semi gloss semi gloss 0 - 100 GU ± 0.2 GU ± 0.5 GU CIE standard observer fo 0.5 seconds / geometry Fe: magnetic, NFe: non-r 0 - 500 Mm (0 - 20 mils) ± (1.5 Mm +2% of meas 999 readings with date a USB one 1.5V AA Alkaline Bat or via USB-port 155 x 73 x 48 mm (6.1 x 0.4 kg (0.9 lbs) 15 - 40 °C (60 - 104 °F) up to 85 %, non-conden |

 $^{^{\}text{1}}$ for 45° and 75° glossmeters see previous pages

Ordering Information

| Cat. No. | Description | |
|----------|-----------------------------------|--|
| 4405 | 4405 USB-Cable micro-gloss family | |
| 4866 | Software smart-lab Gloss | |
| 4867 | Software smart-process Gloss | |

Note: smart-chart license fee for more than two installations is quantity dependent. Please contact your local BYK-Gardner representative.

Lapsonia

Accessories

| For data transfer from the gloss | smeter to a PC, USB-A |
|----------------------------------|---|
| Software for professional analy | sis and documentation in the laboratory |
| Process QC Software for analys | sis of multi-component products |
| Export / Import | Standards (.xml format) |
| | Organizer (.xml format) |
| Languages | English, German, French, Italian, |
| | Spanish, Chinese, Japanese |

2-170 Shield Ct Markham, Ontario L3R 9T5 905-475-5880

² for S-Type glossmeters see previous page