

GLOSS METER

micro-gloss

Single angle gloss meters for specific applications

The micro-gloss has been the unsurpassed industry standard in gloss measurement for many years. The smart functions and intuitive menu operation with the brilliant color display make gloss measurement an easy task. Outstanding performance in temperature control and inter-instrument agreement guarantee always reliable QC. In addition, the smart-chart software is the ideal tool for smart communication with professional documentation and efficient data analysis.

- Excellent repeatability and inter-instrument agreement guaranteed
- Intelligent auto diagnosis guarantees always accurate readings
- Brilliant color display: easy to read - easy to use
- Statistics, Pass/Fail and Memory - ideal for QC and checks in the field
- Continuous mode to check uniformity over large areas
- smart-chart software: instant QC reports with trend graph and Pass/Fail limits

Features / Equipment:

- 20° for high gloss paint and plastic
- 60° for semi gloss paint and plastic
- 85° for low gloss paint and plastic
- 45° for ceramic and plastic films
- 75° for paper and vinyl siding



Standards:

- micro-gloss 20°, 60° and 85°: ISO 2813, 7668 / ASTM D 523, D 2457/ DIN 67530 / JIS Z8741
- micro-gloss 45° and 75°: ASTM C 346 (45°), D 2457, D 3679 (75°) / JIS Z8741 / TAPPI T480 (75°)

Technical data:

	micro-gloss 20°	micro-gloss 60°	micro-gloss 85°	micro-gloss 45°	micro-gloss 75°
Characteristics					
Geometry	20°	60°	85°	45°	75°
Application	high gloss	semi gloss	low gloss	Ceramic, Plastic, Film	Paper, Vinyl Siding
Measurement area [mm] (in)	10x10 (0,4x0,4)	9x15 (0,35x0,6)	5x38 (0,2x1,5)	9x13 (0,35x0,5)	7x24 (0,3x0,95)
Measuring range	0 - 100 GU 100 - 2000 GU	0 - 100 GU 100 - 1000 GU	0 - 100 GU 100 - 160 GU	0 - 100 GU 100 - 180 GU	0 - 100 GU 100 - 140 GU
Repeatability	± 0,2 GU ± 0,2 %	± 0,2 GU ± 0,2 %	± 0,2 GU ± 0,2 %	± 0,2 GU ± 0,2 %	± 0,2 GU ± 0,2 %
Comparability	± 0,5 GU ± 0,5 %	± 0,5 GU ± 0,5 %	± 0,5 GU ± 0,5 %	± 0,5 GU ± 0,5 %	± 0,5 GU ± 0,5 %
Measurement time [s]	0,5	0,5	0,5	0,5	0,5
Interface	USB	USB	USB	USB	USB
Power supply	1,5 V Battery / USB-port	1,5 V Battery / USB-port	1,5 V Battery / USB-port	1,5 V Battery / USB-port	1,5 V Battery / USB-port
Dimensions					
Width [mm]	155	155	155	155	155
Height [mm]	73	73	73	73	73
Depth [mm]	48	48	48	48	48
Weight [kg]	0,4	0,4	0,4	0,4	0,4

micro-gloss S-family

Gloss meters for toughest specifications

Features / Equipment:

- Improved repeatability and inter-instrument agreement for measurement of low gloss samples (< 20 gloss units)
- For any material: paint, plastic, leather or mirror-like metals



micro-gloss XS / XS-S

Small port for small parts

Features / Equipment:

- 60° geometry with 2x4 mm measuring area, ideal solution for small parts
- 60° XS-S version with improved repeatability and inter-instrument agreement for low gloss samples (< 20 gloss units)



micro-TRI-gloss

Three angle gloss meter - see gloss changes under the right angle

Features / Equipment:

- 20, 60 and 85° in one: from high to low gloss - have the specified angle on hand
- For any material: paint, plastic or even mirror-like metals
- All angles measure at the same location, and the results appear simultaneously



micro-TRI-gloss μ

Measure Gloss and Film Thickness at the same time - with one unit

Features / Equipment:

- Fast gloss and thickness control - at the same position
- 20, 60 and 85° for high gloss to matte coatings
- Fe/NFe sensor measures on ferrous and non-magnetic metal substrates

Standards:

- Gloss: ISO 2813 / ASTM D 523 / DIN 67530
- Film thickness: ISO 2178, 2360, 2808 / ASTM B499, D 1400



smart-chart Software

smart-lab Gloss

Features / Equipment:

- Powerful Standard Management to define tolerances and limits
- Export and import of digital standards among the entire supply chain for seamless communication
- Customer specific color scales are predefined
- Simultaneous display of results in a data table / graphs: scatter plot, line/travel diagram and spectral curves
- Easily toggle between measurement conditions: illuminant / observer – color equations
- Pass/Fail tolerances based on commonly available color difference methods or customer specific color scales
- Swap standard with sample and vice versa for ultimate flexibility
- Calculation of mean value based on a population of samples to be used as a new standard

smart-process Gloss

Features / Equipment:

- Powerful Standard Management to define tolerances and limits
- Customer specific color & appearance scales are predefined
- Specific algorithms to analyze different structure types: leather-like, coarse paint and fine textures
- Export and import of digital standards among the entire supply chain for seamless communication
- Organizers for clear sample identification and menu guided operation on the instrument
- Product schematics help to define sampling procedure
- Easy to read data table with Pass/Fail results highlighted based on tolerances set in Standard Management
- Test Report for harmony evaluation of a single test series
- Scorecard to give a quick overview how production is running over a certain time period
- Trend Report - typical process control chart showing data over time or by individual

Technical data:

	micro-gloss 60° S	micro-gloss 60° XS	micro-gloss 60° XS-S	micro-TRI-gloss	micro-TRI-gloss μ
Characteristics					
Geometry	60°	60°	60°	20°, 60°, 85°	20°, 60°, 85°
Application	semi gloss	semi gloss	semi gloss	universal	universal
Measurement area [mm] (in)	9x15 (0,35x0,6)	2x4 (0,08x0,16)	2x4 (0,08x0,16)	see single angle	see single angle
Measuring range GU	0 - 20 GU 20 - 100 GU 100 - 1000 GU	0 - 100 GU 100 - 1000 GU	0 - 20 GU 20 - 100 GU 100 - 1000 GU	20°: 0 - 2000 GU 60°: 0 - 1000 GU 85°: 0 - 160 GU	20°: 0 - 2000 GU 60°: 0 - 1000 GU 85°: 0 - 160 GU
Repeatability	± 0,1 GU ± 0,2 GU ± 0,2 %	± 0,2 GU ± 0,2 %	± 0,1 GU ± 0,2 GU ± 0,2 %	0 - 100 GU: ±0,2 GU 100 - 2000 GU: ±0,2%	0 - 100 GU: ± 0,2 GU 100 - 2000 GU: ±0,2%
Comparability	± 0,2 GU ± 0,5 GU ± 0,5 %	± 0,5 GU ± 0,5 %	± 0,2 GU ± 0,5 GU ± 0,5 %	0-100 GU: ±0,5 GU 100 - 2000 GU: ±0,5%	± 0,5 GU ± 0,5 %
Measurement time [s]	0,5	0,5	0,5	0,5	0,5
Substratum					Fe / NFe
Measuring range GU [μm]					0-500
Accuracy					± (1,5 + 2 %)
Interface	USB	USB	USB	USB	USB
Power supply	1,5 V Battery / USB-Port	1,5 V Battery / USB-Port	1,5 V Battery / USB-Port	1,5 V Battery / USB-Port	1,5 V Battery / USB-Port
Dimensions					
Width [mm]	155	155	155	155	155
Height [mm]	73	73	73	73	73
Depth [mm]	48	48	48	48	48
Weight [kg]	0,4	0,4	0,4	0,4	0,4