

## micro-gloss

Efficient gloss measurement makes your QC faster

The first micro-gloss became the industry standard in gloss measurement. The new micro-gloss combines the well known ease-of-use and protected calibration in the holder with a new and unique functionality – designed for today's QC standards.

### In the lab, in production, at the customer's ...

the micro-gloss is always ready, including calibration holder. Small as a digital camera – it is safe in your hand. Thanks to a well structured menu and a new scroll wheel the operation is easier than ever before.

### Features:

- Small and user-friendly – fits into a lab coat pocket even with the calibration holder
- Automatic calibration – ready to measure
- Single button calibration and menu guided operation make gloss measurement simple
- Single measurement and statistic mode incl. number of readings, mean and std. deviation
- High memory capacity: 999 readings
- RS 232 interface allows you to transfer data to a PC or printer
- easy-link Software included for professional documentation and further analysis in Excel®
- Long battery life – up to 3000 readings
- Traceable to BAM (Federal Institute of Material Research and Testing, Germany)
- Conform to following standards: ASTM D 523, D 2457, DIN 67530, ISO 2813, ISO 7668, JIS Z 8741



### Software:

#### Fast and professional documentation

Every measurement series can be saved under its own name. Input of sample names can be done quickly with the scroll wheel.

The included software easy-link allows direct data transfer to Excel® and your results are immediately shown in a professional QC-report.

Trail#	Name	L*	a*	b*	DL*	Da*	D6*
STD	Standard green	69.377	-12.3961	-1.2004	0	0	0
1	green #002	69.025	-12.4964	-0.9057	0.4519	-0.1000	0.3946
2	green #004	69.8794	-12.8959	0.9995	0.6024	-0.0979	0.521
3	green #005	69.8445	-12.3368	-0.9533	0.4078	0.0673	0.3071
4	green #006	69.8465	-12.3338	-0.9696	0.4715	0.0622	0.3107
5	green #008	69.9543	-12.5022	-1	0.6772	-0.1062	0.2804
6	green #009	69.754	-12.5548	-1.0159	0.377	-0.1587	0.2646
7	green #010	69.7542	-12.5577	-1.0074	0.3772	-0.1616	0.2729
8	green #011	69.7476	-12.5513	-1.0069	0.3707	-0.1552	0.2734
9	green #012	69.9255	-12.6194	-0.6930	0.5400	-0.2230	0.3656

# Gloss Meter

## Technical data:

	micro-gloss 20°	micro-gloss 60° / micro-gloss 60°S	micro-gloss 85°
<b>Dimensions</b>			
Width (mm)	155	155	155
Height (mm)	73	73	73
Depth (mm)	48	48	48
Weight (kg)	0,4	0,4	0,4
<b>Characteristics</b>			
Geometry	20°	60°	85°
Application	high gloss	medium gloss	low gloss
Measuring area (mm)	10 x 10 (20°)	9 x 15 (60°)	5 x 38 (85°)
Range (GU)	0 ... 2000 (20°)	0 ... 1000 (60°C)	0 ... 160 (85°)
Measuring time (s)	0.5	0.5	0.5
Repeatability			
Measuring range of 0 ... 100 GU (+/- GU)	0.2	0.2 / 0.1 (upto 10 GU)	0.2
Measuring range of 100 ... 2000 GU (+/- %)	0.2	0.2	0.2
Reproducibility			
Measuring range of 0 ... 100 GU (+/- GU)	0.5	0.5 / 0.2 (upto 10 GU)	0.5
Measuring range of 100 ... 2000 GU (+/- %)	0.5	0.5	0.5
<b>Software</b>			
Continuous	actual value, average, min., max.		
Difference and Pass / Fail	memory for 50 references with limits		
Statistics	number of readings per sample are selectable from 2 ... 99		
Display in 3 columns selectable	actual value, average, std. dev., min., max., range, difference, pass/fail		
Memory	999 readings with date and time, with recall function		
Interface and software	serial RS 232 (easy link incl.)		
Long term calibration	with automatic check of the calibration standard		
Menue guidance switchable in	English, Spanish, German, French, Italian, Japanese		
Auto shut-off time selectable (s)	10 ... 99		
Power supply	one 1,5 V - AA Alkaline Battery (10,000 readings) or external power		

## micro-TRI-gloss

Efficient gloss measurement makes your QC faster

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### Recognize deviations from the specification – right away

20°, 60°, 85° in one – as handy as the one angle unit. Having three geometries in one unit allows you to be in compliance with international standards and to quickly recognize quality variations. All selected geometries are measuring at the same location and the results are displayed instantly – including Difference, Pass/Fail and Statistics. The micro-TRI-gloss has all functions of the new generation readily at hand.

### Features:

- Small and user-friendly – fits into a lab coat pocket even with the calibration holder
- Automatic calibration – ready to measure
- Single button calibration and menu guided operation make gloss measurement simple
- Single measurement and statistic mode incl. number of readings, mean and std. deviation
- High memory capacity: 999 readings
- RS 232 interface allows you to transfer data to a PC or printer
- easy-link Software included for professional documentation and further analysis in Excel®
- Long battery life – up to 3000 readings
- Traceable to BAM (Federal Institute of Material Research and Testing, Germany)
- Conform to following standards: ASTM D 523, D 2457, DIN 67530, ISO 2813, ISO 7668, JIS Z 8741

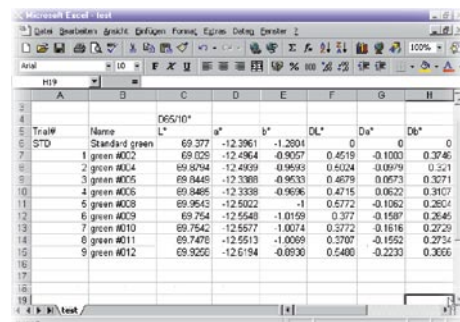


### Software:

#### Fast and professional documentation

Every measurement series can be saved under its own name. Input of sample names can be done quickly with the scroll wheel.

The included software easy-link allows direct data transfer to Excel® and your results are immediately shown in a professional QC-report.



Trail#	Name	L*	a*	b*	DL*	Du*	Dv*	Dw*
STD	Standard green	69.377	-12.3961	-1.2804		0	0	0
1	green M02	69.025	-12.4964	-0.9057	0.4519	-0.1003	0.3746	
2	green M04	69.6294	-12.4939	0.9593	0.6024	0.0979	0.251	
3	green M05	69.8445	-12.3368	0.9533	0.4079	0.0973	0.3271	
4	green M06	69.8465	-12.3338	0.9696	0.4715	0.0622	0.3107	
5	green M08	69.9543	-12.5022	-1	0.6772	-0.1062	0.2604	
6	green M09	69.754	-12.6548	-1.0199	0.377	-0.1597	0.2846	
7	green M10	69.7542	-12.6577	-1.0274	0.3772	-0.1616	0.2229	
8	green M11	69.7476	-12.5513	-1.0059	0.3707	-0.1552	0.2754	
9	green M12	69.9255	-12.6194	-0.8930	0.5488	-0.2233	0.3656	

# Gloss Meter

## Technical data:

	<b>micro-TRI-gloss / micro-TRI-gloss S</b>
<b>Dimensions</b>	
Width (mm)	155
Height (mm)	73
Depth (mm)	48
Weight (kg)	0,4
<b>Characteristics</b>	
Geometry	20° / 60° / 85°
Application	universal
Measuring area (mm)	10 x 10 (20°) 9 x 15 (60°) 5 x 38 (85°)
Autorange (GU)	0 ... 2000 (20°) 0 ... 1000 (60°C) 0 ... 160 (85°)
Measuring time (s)	0.5
Repeatability	
Measuring range 0 - 10 GU (+/- GU)	0.2 / 0.1
Measuring range 0 - 100 GU (+/- GU)	0.2
Measuring range 0 - 2000 GU (+/- %)	0.2
Reproducibility	
Measuring range 0 - 10 GU (+/- GU)	0.5 / 0.2
Measuring range 0 - 100 GU (+/- GU)	0.5
Measuring range 0 - 2000 GU (+/- %)	0.5
<b>Software</b>	
Continuous	actual value, average, min., max.
Difference and Pass / Fail	memory for 50 references with limits
Statistics	number of readings per sample are selectable from 2 ... 99
Display in 3 columns selectable	actual value, average, std. dev., min., max., range, difference, pass/ fail
Memory	999 readings with date and time, with recall function
Interface and software	serial RS 232 (easy link incl.)
Long term calibration	with automatic check of the calibration standard
Menue guidance switchable in	English, Spanish, German, French, Italian, Japanese
Auto shut-off time selectable (s)	10 ... 99
Power supply	one 1,5 V - AA Alkaline Battery (10,000 readings) or external power

## micro-gloss 45

Specialized for gloss measurement of ceramics, plastics and plastic films

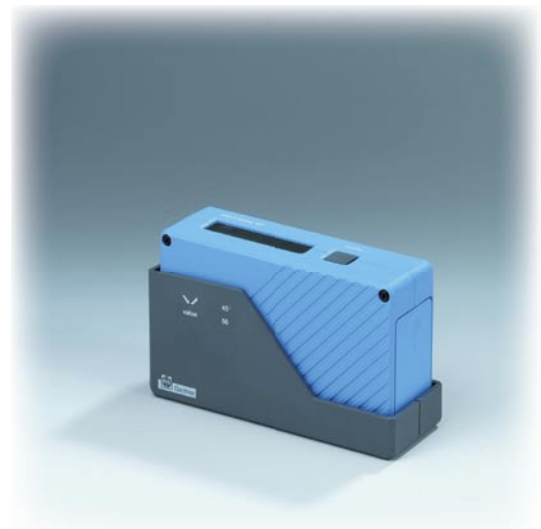
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- easy-link Software included for professional documentation and further analysis in Excel®
- Long battery life – up to 3000 readings
- Traceable to BAM (Federal Institute of Material Research and Testing, Germany)
- Conform to following standards: ASTM C 346, D 2457, D 3679, JIS Z 8741, Tappi T 480



### Technical data:

	micro-gloss 45
<b>Dimensions</b>	
Width (mm)	148
Height (mm)	72
Depth (mm)	55
Weight (kg)	0,5
<b>Characteristics</b>	
Geometry	45°
Application	Film
Measuring area (mm)	9 x 13
Range (GU)	0 - 180
Repeatability (GU)	0.5
Reproducibility (GU)	1

# Gloss Meter

## Options:

- Black suction plate for fixing very thin film
- High and medium gloss tile
- Software
- USB Interface
- 40 columns serial printer

