

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.



**Auto diagnosis:
Standard OK – Calibration OK**

The calibration standard is always protected and exactly positioned in the holder. New: the intelligent auto diagnosis tells you when to calibrate and even checks whether the standard is clean. Operator friendly. Safe.



Always accurate gloss values

With the new micro-gloss you can measure any material - paints, plastics or highly reflective metals. Its new expanded measurement range of up to 2000 gloss units guarantees always reliable results - according to international standards and DIN-approved*.

The long-term stable light source and patented illumination control provide a superior accuracy for many years. Lamp changes will no longer be needed, we even give you a 10 year guarantee on the lamp life.



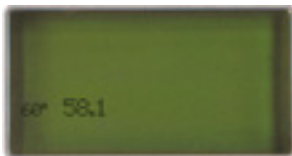
**approved by the BAM
(Federal Institute of Material
Research and Testing, Germany)*

Optimally tailored to all your measurement needs

Different tasks ask for different tools. The easy to turn scroll wheel quickly shows you all needed functions - even without a PC:

- Check uniformity on the sample?
- ➔ Continuous mode. With Min. and Max.
- Compare the difference to the target?
- ➔ Difference mode. With Pass/Fail.
- Average several readings per panel?
- ➔ Statistic mode. With all statistical data.
- Number of readings per sample are selectable.

Or just check a few samples in between for a colleague? Use the Basic mode to interrupt the series and operation is reduced to the simplest task.



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.

micro-TRI-gloss:

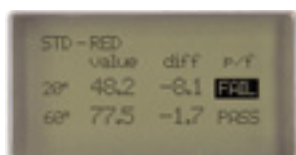
Recognize deviations from the specification – right away

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.

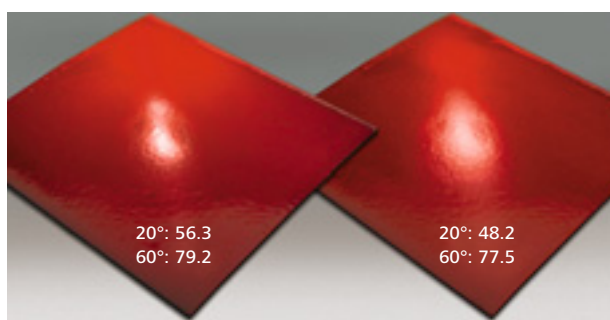


The micro-gloss family: Overview of functions

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 to 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 (included)
Especially micro-TRI-gloss	simultaneous display 2 or 3 geometries
Long-term calibration	with automatic check of the calibration standard
Autorange	0 - 2000 GU (20°); 0 - 1000 GU (60°); 0 - 160 GU (85°)
Measuring time	0,5 seconds / geometry
Menue guidance switchable in	English, Spanish, German, French, Italian, Japanese
Auto shut-off time	selectable 10 - 99 seconds
Power	one 1.5V Mignon Alkaline Battery 10000 readings or external power supply
Operating temperature	15 - 40 °C (60 - 104 °F)
Relative humidity	up to 85 %, non-condensing



In order to obtain differences clearly over the whole range from matte to high gloss, three measurement geometries were specified in international standards. Each geometry is optimized for a specific gloss range.



The different gloss of these two samples is more clearly shown in the 20° readings.



Visit www.micro-gloss.com

Standards

ASTM	D 523	D 2457
ISO	2813	7668
DIN	67530	
JIS	Z 8741	

Ordering Information

Cat. No.	Description
E-4430	micro-TRI-gloss
E-4420	micro-gloss 20°
E-4460	micro-gloss 60°
E-4485	micro-gloss 85°
EE-4420	Extended Warranty one year additional

Comes complete with:

Instrument
Holder with integrated calibration tile
Traceable certificate
Software easy-link
PC-cable
Operating manual
Battery
Carrying case

Ordering Information

Cat. No.	Description
E-4400	PC-cable
E-4545	BYKWARE easy-link
E-4401	USB-adaptor
E-4404	Power supply, US
E-4403	Power supply, EU



Technical Specification

Geometry	Application	Measuring Area	
20°, 60°, 85°	universal	see single angle	
20°	high gloss	10 x 10 mm (0.4 x 0.4 in)	
60°	semi gloss	9 x 15 mm (0.35 x 0.6 in)	
85°	low gloss	5 x 38 mm (0.2 x 1.5 in)	
Dimensions	Range	Repeatability	Reproducibility
155 x 73 x 48 mm (6.1 x 2.9 x 1.9 in)	0–99.9 GU 100–2000 GU	0.2 GU 0.2 %	0.5 GU 0.5 %
Weight			
0.4 kg (0.9 lb)			

Accessories

For data transfer to a PC, RS 232 Sub-D 9-pins
Software for direct data transfer and documentation in Excel® (see page 20)
For connection to USB-interface, incl. driver software
For external power supply, 90 - 264 V self adapting, USA plug
For external power supply, 90 - 264 V self adapting, European plug

Calibration Holder

Ordering Information

Cat. No.	Description	
E-4421	Calibration holder 20°	Replacement
E-4461	Calibration holder 60°	Replacement
E-4486	Calibration holder 85°	Replacement
E-4431	Calibration holder TRI	Replacement

Comes complete with:

Holder with integrated calibration tile and traceable certificat



Checking Standard

In order to control the performance and linearity of the glossmeter it is recommended to use a checking standard periodically. The control interval is dependent on the usage conditions of the glossmeter.

The gloss tiles are built into an aluminum track that the instrument fits into to guarantee accurate and repeatable measurements. The included certificate is traceable to international institutes.



For Recertification
and Calibration
Services
see pages 169 - 170

Ordering Information

Cat. No.	Description
E-4422	Checking standard 20°
E-4462	Checking standard 60°
E-4487	Checking standard 85°
E-4434	Checking standard TRI
E-4433	Checking standard mirror

Comes complete with:

Checking standard in aluminum track with traceable certificat

Technical Specification

Dimensions	
170 x 103 x 17 mm (6.7 x 4.1 x 0.7 in)	High and semi gloss tile
170 x 103 x 17 mm (6.7 x 4.1 x 0.7 in)	High and semi gloss tile
170 x 103 x 17 mm (6.7 x 4.1 x 0.7 in)	High and semi gloss tile
170 x 103 x 26 mm (6.7 x 4.1 x 1 in)	High gloss and 3 semi gloss tiles 20, 60, 85°
170 x 103 x 26 mm (6.7 x 4.1 x 1 in)	High gloss and 3 semi gloss tiles 20, 60, 85°