

**Integrated  
USB interface (Mini)**

**Gloss Meter  
PICOGLOSS  
503**

**User-friendly  
PC evaluation software**



**Extensive  
statistical evaluations  
within the instrument**

testing equipment for quality management

**ERICHSEN**

since 1910

Technical Description

**Measurements in  
accordance with  
EN ISO, DIN, ISO, ASTM,  
BS, JIS**

**Portable  
three-angle measuring  
instrument  
20°/60°/85°**

## Design

The **PICOGLOSS 503** is a compact, portable **three-angle gloss meter** with measuring geometries of 20°, 60° and 85°, for standardised measurements (in accordance with DIN, ISO, ASTM, BS and JIS) of all three gloss ranges "high gloss", "medium gloss" and "low gloss" - **thus it is almost universally applicable.**

The **PICOGLOSS 503** is operated by way of a scroll wheel using a simple, user-friendly navigation on the color display. The measuring procedure is started by actuating a key that is located at the side in an ergonomic manner.

In case of e. g. high gloss metallic or chromium-plated surfaces the instrument switches over automatically to mirror gloss measurement.

The integrated USB (Mini) interface enables the data transmission to a PC. Additionally, also the power supply can be provided through the integrated USB (Mini) interface, by a PC.

The **PICOGLOSS 503** is caught in a handy ever-ready case which also houses the calibration standard "A".

## Special features

### Menu

The menu prompting is multi-lingual; switchable to English, German, French, Spanish, Italian, Japanese, Portuguese and Russian.

### Display

In addition to the measuring and calibration values, the high-contrast LC display shows the current mode as well as messages and instructions.

### Calibration and automatic check

For the calibration only **one** calibrating standard is required. After key pressure the calibration routine runs automatically. The calibration value is stored in the **PICOGLOSS 503**. After switching on the instrument a self-test of approx. 2 seconds is made automatically assessing also the condition of the standard. If necessary, a check or cleaning of the calibrating standard is recommended on the display.

### Mirror gloss

The instrument switches over automatically e. g. in case of high-gloss metallic or chromium-plated surfaces the reflection values of which exceed the standard measuring range:

- 20° → 0 - 2000 (GU)

- 60° → 0 - 1000 (GU)

- 85° → 0 - 160 (GU).

(GU = gloss units)

### Continuous measurement

With this the current value, the average value as well as the minimum and maximum values are indicated.

### Evaluation software "smart-lab Gloss"

Software for data transmission for memory reading or online measurement with a test report compiled beforehand is available free of charge at [www.erichsen.de](http://www.erichsen.de).

## Statistics

In the statistic mode several measurements ( 2 to 99) can be carried out on each specimen. These are evaluated statistically and displayed. The results can be stored and compared with a reference. There is a choice of three different columns in the display:

- current value, average value, minimum/maximum value
- spread, standard deviation, difference,
- pass / fail (within/out of tolerance in comparison with the reference).

## Accuracy

Range: 0 - 99.9 (GU)  
Repeatability: 0.2 (GU)  
Reproducibility: 0.5 (GU)

Range: 100 - 2000 (GU)  
Repeatability: 0.2 %  
Reproducibility: 0.5 %  
(GU = gloss units)

## Technical Data

Dimensions (W x L x H): 48 x 155 x 73 mm

Weight (net): approx. 400 g

Power supply: 1.5 V mignon alkaline battery  
(suffices for approx. 10.000 measurements)  
or via USB-port of PC

Memory: 999 measurements with date and time in up to 50 storage areas

Difference measurement: memory for 50 references

Order Information	
Ord.-No.	Product Description
0176.04.31	<b>Gloss meter PICOGLOSS 503</b>
<i>Included in the scope of supply:</i> Holder with integrated gloss standard A USB cable Hand strap Battery Carrying case Calibration Certificate Short instructions/Safety instructions (Detailed user manual is available free of charge at <a href="http://www.erichsen.de">www.erichsen.de</a> )	

Accessories	
Ord.-No.	Product Description
0455.02.32	Medium gloss standard B
0456.02.32	Gloss standard A (spare)

Subject to technical modifications.  
Group 17 - TBE 503 – VIII/2020