

# testing equipment for quality management



# **Technical Description**

Measurements in accordance with EN ISO, DIN, ISO, ASTM, BS, JIS Portable three-angle measuring instrument 20°/60°/85°

# <u>Design</u>

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 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 chromiumplated surfaces the instrument switches over automatically to mirror gloss measurement.

The integrated USB (Mini) as well as Bluetooth<sup>®</sup> interfaces enable 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 catched in a handy everready 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 Russain.

#### 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 "gloss-link"

Software for data transmission for memory reading or online measurement with a test report compiled beforehand.

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

### **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	
OrdNo.	Product Description
0176.03.31	Gloss meter PICOGLOSS 503
Included in the scope of supply: Holder with integrated gloss standard A Evaluation software "gloss-link" on CD Bluetooth <sup>®</sup> adapter Bluetooth <sup>®</sup> installation CD USB cable Hand strap Battery Carrying case Calibration Certificate Operation instructions on CD Short instructions/Safety instructions	

Accessories		
OrdNo.	Product Description	
0455.02.32	Medium gloss standard B	
0456.02.32	Gloss standard A (spare)	

Subject to technical modifications. Group 17 - TBE 503 - XII/2009