■ Specifications Optical system

IG-331

60° measurement: Incident angle 60° Incident angle 60° Reception angle 60° Reception angle 60° 20° measurement: Incident angle 20°

IG-320

Reception angle 20° Measuring area 60° measurement: 3 x 6 mm oval 12 mm x 6 mm oval 20° measurement: 3 x 4 mm oval LED (wavelength: 880 nm) LED (wavelength: 890 nm) Light source SPD (silicone photodiode) Detector

SPD (silicone photodiode) 0-100.0 Measuring range 0-100 0-199.0 (resolution: 0.1) Display range 0-199 (resolution: 1)

±0.5% F.S. ±1 digit ±5% F.S. ±1 digit Reproducibility A3 dry-cell battery x 4 S-006P dry battery (9VDC) for operation, Power source

CR-2025 lithium battery (3VDC) for memory Not rechargeable Continued use time | 50 hours or more 15 hours or more **Ambient conditions** 10-40°C

78 (W) x 189 (H) x 58 (D) mm Dimensions Main body: 140 (W) x 75 (H) x 34 (D) mm 3.1 (W) x 7.4 (H) x 2.3 (D) in 5.5 (W) x 3.0 (H) x 1.3 (D) in Optical system: 88 (W) x 30 (H) x 45 (H) mm

3.5 (W) x 1.2 (H) x 1.8 (H) in Mass Approx. 400g (with battery) Approx. 350g (with battery) Additional

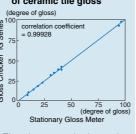
Automatic calibration Automatic calibration **Functions** Automatic power cut-off Automatic power cut-off Display hold Display hold Overrange display Overrange display Battery life display Battery alarm

Built-in data memory (max. 99) Computation of averages Keystroke confirming tone

Note: Use the 20° measurement mode of the IG-331 when the gloss value in the 60° measurement mode exceeds 70.

Accessory Protective cap (with standard surface for calibration)

■ Example of measurement of ceramic tile gloss



The above graph shows the results of measuring ceramic tiles, widely used as the standard surface for the mediumgloss range (secondary standard surface) because of the stability of surface conditions. The IG Series produces extremely precise values.

●What is Glossiness?

Gloss is a quantity that expresses the degree of reflection when light hits a surface. It is detemined by comparing the strength of reflected light from the area being measured with that from the standard surface.

HORIB/A

Explore the future

High-precision measurements with

an integral light source and

detector lets the user gather

GLOSS CHECKER

IG Series

IG-320 IG-331

and view averaged data IG-320

Digital display brings pinpoint accuracy to Imbotec Group

Horiba continues contributing to the preservation of the global environment through analysis and measuring technology.

To assure safe and proper handling of the product.

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Award of Certification

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Please read the operation manual before using this product to assure safe and proper handling of the product.

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10043 Orbassano, Torino, Italy ne: 39 (011) 904060:

High-efficiency and flexibility utilizing a separate detector and light source offers the ability to switch between 60 and 20 degree measuring angles

IG-331



Printed in Japan ZM-N(SK)83 Bulletin: HRE-0000A

Handy Digital Gloss Checkers Allow Objective, **Quantified Gloss Measurements**

Designed for greater ease of operation, maintain clean surfaces and improve quality control inspection in various industrial applications.

High-Efficiency Measurements Enables Easy Switching of Measuring Angles (60° and 20°)

The flexible, remote connection of the probe to the display unit ensures greater work efficiency and safety in all applications.

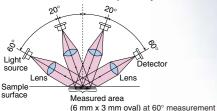
One-Touch Calibration

Just press the calibration key (CAL) to start automatic, sequential zero-span calibration.

Selectable Measuring Angle (60° or 20°)

Choose 60° for standard gloss measurements. For high-gloss surfaces with gloss values over 70, simply switch to the 20° measuring angle. The selectable angle feature makes it easy to measure glossy surfaces.

■ Gloss Checker IG-331 Optical System



IG-331



Guaranteeing uniform production quality and standards for gloss mesurement. HORIBA's IG Series Gloss Checkers display gloss measurements as numerical data, eliminating ambiguity and ensuring objective evaluation of a product's quality. Compact in design and ready when powered on, all the user needs to do is hold the portable gloss checker against the surface being evaluated for quality control of paints, polishes, floor maintenance and many other industrial applications.

High-Precision Measurements Lets Users Gather Data or View Averages with a Single Key Operation

The compact, lightweight design is ideal for production line and outdoor applications.

IG-320



High-Precision Measurements with ±0.5% Full-Scale Reproducibility

The combination of the near infrared ray pulse system, virtually unaffected by ambient lights or colors, and HORIBA's proprietary measuring system provides a high-precision gloss checking system compatible with JIS standards.

Gather Data or View Averages with a Single Key Operation

Up to 99 measurements can be taken with a simple key operation and averaged using another key. Up to 99 averages can be stored for later use. Easy data management promises smooth inspection work.



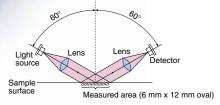






Up to 99 averages (AVERAGE No. 99) can be stored by repeating two simple steps

■ Gloss Checker IG-320 Optical System



Versatile applications

●Quality control of paint and ink

For quality testing outdoor exposure testing, hue adjustment or luster testing

Check and diagnosis of coated surfaces

CE marking compliant

Check external coating, cleaning or waxing condition of vehicles, shops, aircraft, bridges iron/steel frames, and structures or prefabricated structures, etc., and diagnosis of deterioration

Checking printed matter

Evaluation of embellishing properties in varnishing stage (lamination, endless processing, etc.); evaluation of time-induced change and uniformity of surface after drving process: checking paper surface condition

●Checking external appearance of plastic molding

For checking external appearance of molded resin products and evaluating weather resistance

Checking building and masonry finishes

Inspection of external appearance, completed product test and site finish test in production stage of enamel, sash, floor materials, stone materials, furniture, etc

•Floor maintenance needs

Inspection of waxed floor finishes in hotels, office buildings and stores

Other uses

For checking quality and external appearance of film, tape, rubber, leather, etc.