

CA22 Stationäres Handgerät mit 45°/0° Geometrie

BRAKENSIEK®
SYSTEMHAUS



964 Portable Spectrophotometer with 0 ° / 45 ° geometry

- Interchangeable covers (standard) 7 mm, 4 mm, 15 mm.
 - Intermediate devices compatibility: 0.15 ΔEab.
 - Short-term repeatability: 0.05 ΔEab on white ceramic
 - Standard Observers 2 ° and 10 °
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- 0 ° / 45 ° measuring geometry
 - Excellent inter-instrument agreement
 - Includes three easily interchangeable orifice plates with 4 mm, 7 mm and 15 mm spot size
 - Project and Job Functions
 - Large, clear LCD display with graphics function
 - Lightweight, compact, portable device
 - Variable measurement with and without a target device
 - opacity, color strength and color sorting
 - Robust construction
 - Off the line by battery

The 964 is an affordable spectrophotometer with 0 ° / 45 ° - measuring geometry. It provides fast and reliable precise color information on a variety of materials such as Paint, varnish, paper, plastics and textiles.

Measurement functions and indices

The 964 measures absolute and differential values for the following colorimetric systems. The values can be output for each of the nine types of light on the 2 ° and 10 ° standard: CIE XYZ, CIE Yxy, CIELAB, Hunter, CIELCH, CMC and Whiteness, Yellowness ASTM E313-98 and metamerism index according to DIN 6172

Special Project and Job Functions

The job function is a programmed sequence of pre-defined steps to support and guide the operator. Up to six different routines with appropriate instructions can be downloaded from the X-Rite software and run on the LCD display. Different color standards can be grouped into defined projects.

Pass / Fail Function

The 964 stores up to 1024 color standards with pass / fail tolerances. The pass / fail rating is displayed on the display as well as red or green LED and an audible signal (when exceeding the tolerance).

Interchangeable orifice plates

With a few simple steps, users can choose between different orifice plates with 4 mm, 7 mm and 15 mm sample aperture. This feature gives the operator a quick and efficient adaptation to the size of the target.

Opacity, color strength and color sorting

The 964 measures three types of opacity and color strength, visual, chromatic or Dreibereichswert. The 555 color sorting is possible with the 964th These are the key indicators for Farbqualitätsprüfung in the processing of plastics, textiles and materials with coated surfaces.

User-friendly ergonomics

In addition to the device's built programs that assist the user during measurement, and the device itself to operate. The 964 is compact, easy to hold and with the wrist strap and side handle grip comfortably. The displays are large and clear. The battery ensures flexibility in the use of the device.

Instrument agreement

The 964 has a superior instrument agreement - in particular in accordance with other Farbkontrollsystemen. The 964 offers an excellent agreement with X-Rite 962 and 968 0 / 45 ° spectrophotometer. All devices communicate with X-Rite's quality assurance and Rezeptiersoftware on Windows level.

Optional Accessories

- Battery Charger
- Replacement Battery Pack
- Various application aids and test accessories
- UV filter
- Software for quality control
- Farbrezeptierungssoftware
- Service and maintenance contracts
- Software Training
- Farbmetrikschulungen

Specifications:

MODEL

964 including all three orifices

Measurement geometry

0 ° / 45 ° EXCHANGE FOR OPTICAL

- measuring 4 mm / 6.5 mm

Target Window

- measuring 7 mm / 9.5 mm

Target Window

- 15 mm measurement / 21.5 mm

Target Window

LIGHT SOURCE

Gas-filled tungsten lamp

LIGHT TYPES

A, C, D50, D65, D75, F2, F7, F11
and F12

Standard Observer

2 ° and 10 °

RECEIVER

Silicon photodiodes with increased
Blue sensitivity

Spectral

400 nm - 700 nm

SPEKTRALINTERVALLE

10 nm - Measurement

10nm - output

STORAGE

1024 standards with tolerances

2000 samples

RANGE

0-200% reflectance

Measuring time

Less than 2 seconds

EQUIPMENT COMPLIANCE

7 mm / 15 mm orifices

CIE L * a * b * DE * ab 0.15 average

Deviation of 12

BCRA Series II Tiles

High DE * ab 0.30 a

Tile

4 mm orifice

CIE L * a * b * DE * ab 0.25 average

Deviation of 12

BCRA Series II Tiles

High 0.40 DE * ab a

Tile

KURZZEITWIEDERHOLBARKEIT1

0.05 DE * ab on white ceramic

(Standard deviation)

LAMP

500,000 measurements

POWER SUPPLY

Removable Battery Pack (Nickel-
Metal hydride), 7.2V 1250 mAh

POWER SUPPLY

180-240 VAC, 50-60 Hz, 15 W max.

Charging time

about 4 hours - 100% capacity

MEASUREMENTS PER LOAD

1000 measurements within

8 hours

OPERATING

10 ° C to 40 ° C

maximum of 85% relative

Humidity (not
condensing)

AUFBEWAHRUNGSTEMPERATUR

-20 ° C to 50 ° C

WEIGHT

1.1 kg

DIMENSIONS

10.9 cm (height), 8.4 cm (width);

19.6 cm (length)

STANDARD EQUIPMENT

Calibration standard, instruction manual
on CD, power supply,
Transport case

OPTIONAL ACCESSORIES

Battery Charger
Replacement battery pack



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