RHOPOINT
INSTRUMENTS

EXTENDED TWO YEAR WARRANTY

PLAY
VIDEO

www.rhopointinstruments.com

RHOPOINT
NOVO-SHADE DUO+

Dual Function 45/0° Reflectometer

MEASURE

- **OPACITY**
- **SHADE**
- **CLEANLINESS**

Rhopoint Instruments Limited
is a member of the
Rhopoint Group

RHOPOINT
NOVO-SHADE DUO+

**The Novo-Shade Duo+ reflectometer has 3 distinct modes of operation each using the 0/45 geometry**

Measure the shade of a surface on a greyscale

Measure substrate opacity/ hiding power

Measure substrate cleanliness

SHADE

Features

Fast measurement
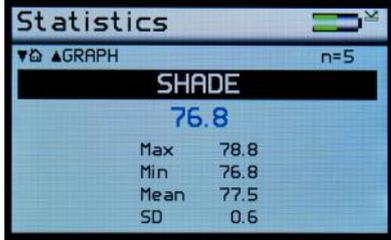
On-board statistics

Trend analysis graph

Single button push to make measurements.

APPLICATIONS

 Shade of paints, inks and coatings

 Chalking of paint

 **Efficiency of detergents and bleaching agents**

 Whiteness of recycled paper

OPACITY

Features

Fast measurement of all parameters
Automatic calculation of opacity
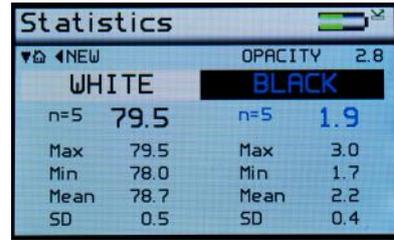
On-board statistics

Measurements are made over a white substrate and then over a black substrate. Opacity is automatically calculated and displayed.

APPLICATIONS

 Hiding power of paints, inks and coatings

 Transparency of plastic film

 Opacity of paper

Features
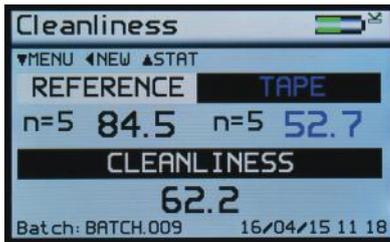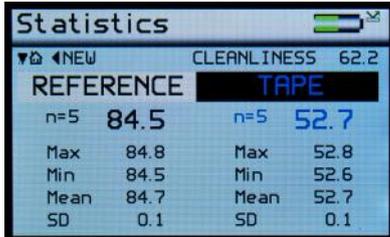
Fast measurement

On-board statistics

Clear tape is pressed on the measurement surface, torn away and stuck onto white paper - For reference a clean piece of tape is also stuck on the same white paper.

Measurements are made of the reference material and then of the tape, cleanliness is calculated automatically.

APPLICATIONS

Cleanliness and oxidisation on metal surfaces

INSTRUMENT FEATURES

Pass / Fail

Easy identification and reporting of non-conformances

Rapid Data Transfer

Software-free data transfer.

USB connection to PC instantly recognises the device as a drive location which facilitates the quick transfer of files using Windows Explorer or similar.

Direct data input via Bluetooth

Instantly transmit measured readings directly to programs such as MS Excel on your PC / tablet / smartphone to greatly simplify the reporting process.

Power

20,000+ readings per charge. The instrument is rechargeable via USB/PC or mains.

Easy Batching (shade mode only)

User definable batch names and batch sizes for quicker and more efficient reporting.

Operation

- Full colour easy to read screen
- Adjustable brightness
- 6 button touch sensitive interface

Construction

- All aluminium construction - enclosure. optics, standard holder
- Integrated calibration holder with in-position detector for error free calibration

RHOPOINT
NOVO·SHADE DUO+

INSTRUMENT SPECIFICATION

Statistical Analysis
▌ Max, min, mean, SD

Graphical Analysis
▌ On board trend analysis

Power
▌ Rechargeable lithium ion
▌ 17+ hours operation
▌ 20,000+ readings per charge

Recharge Time
▌ Mains charger: 4hrs

Standards
▌ ISO 2814, 6504, BS 3900-D4, D7, ASTM E97, E1347, D4214 ASTM D2805, D589

Memory
▌ 8 MB = 999 readings
▌ User definable alphanumeric batching

Data Transfer
▌ Bluetooth
▌ PC compatible
▌ USB connection, no software installation required

Performance
▌ Resolution 0.1
▌ Repeatability 0.2%
▌ Reproducibility 0.5%
▌ Operating temperature 15 - 40° C (60 - 104° F)
▌ Humidity up to 85%, non condensing

Dimensions & Weights
▌ Measurement spot size: 15 x 10mm elipse
▌ 65mm x 140mm x 50mm (H x W x D)
▌ 790g
▌ Packed weight: 1.75kg
▌ Packed dimensions: 180mm x 330mm x 280mm (H x W x D)
▌ Commodity code: 9027 5000

Order Code A4000-010

Languages Available

MEASUREMENT UNITS

Shade mode
0 = black – no reflectance
100 = brilliant white – full reflectance

Opacity mode
0 = completely transparent
100 = fully opaque

Cleanliness mode
0 = No change
100 = Maximum change

INCLUDED ACCESSORIES

▌ Calibration tile with certificate
▌ USB data cable
▌ Novo-Gloss Multi Gauge Software

▌ Instruction manual
▌ Bluetooth data app
▌ Example Excel spreadsheets
▌ Instructional videos

EXTRAS

FREE EXTENDED WARRANTY

FREE LIGHT SOURCE WARRANTY
Guaranteed for the life of the instrument

CALIBRATION AND SERVICE
Fast and economical service via our global network of accredited calibration and service centres. For detailed information, please visit www.rhopointinstruments.com/support

BCF
Associate
BRITISH COATINGS FEDERATION

bsi. UKAS

LOCAL AGENT