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# RHOPOINT Novo-shade duo+

Opac

21-10

VD.E

NO

MENU

=5

WHITE

79.5

BATCH.008

n

8

15 11

OPACI

# Dual Function 45/0° Reflectometer

Measure
Opacity
Shade
Cleanliness



# RHOPOINT Novo-shade Duo+

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



### SHADE

#### Features



#### Fast measurement

Statistics	<b>20</b> ×			
The AGRAPH	n=5			
SHADE				
76.8				
Max	78.8			
Min	76.8			
Mean	77.5			
SD	0.6			

#### **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

Statistics 💴 🔁			
		OPACITY 2.8	
ωH	ITE	BLACK	
n=5	79.5	n=5	1.9
Max	79.5	Max	3.0
Min	78.0	Min	1.7
Mean	78.7	Mean	2.2
SD	0.5	SD	0.4

**On-board statistics** 

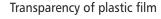


Measurements are made over a white substrate and then over a black substrate. Opacity is automatically calculated and displayed.

### APPLICATIONS



Hiding power of paints, inks and coatings





Opacity of paper

### CLEANLINESS

#### Features



Fast measurement of all parameters Automatic calculation of cleanliness

Statistics				
The Second Seco		CLEANLINESS 62.2		
REFE	RENCE	TA	PE	
n=5	84.5	n=5	52.7	
Max	84.8	Max	52.8	
Min	84.5	Min	52.6	
Mean	84.7	Mean	52.7	
SD	0.1	SD	0.1	

**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.

Cleanliness	<b>20</b> 2		
▼MENU ∢NEW ▲STAT			
REFERENCE	TAPE		
n=5 84.3	n=5 53.2		
CLEANL	INESS		
62.4			
Batch: BATCH.010	16/04/15 11 20		

**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+

### SPECIFICATIONS

#### **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 (withdrawn), 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%
- Reproduceability 0.5%
- Measurement area: 15mm x 10mm elipse
- Operating temperature 15 40° C (60 104° F)
- Humidity up to 85%, non condensing

#### **Dimensions & Weights**

- 65mm x 140mm x 50mm (H x W x D)
- 790g L
- Packed weight: 1.75kg
- Packed dimensions: 180mm x 330mm x 280mm (H x W x D)
- Commodity code: 9027 5000

### Order Code:

Languages:

### MEASUREMENT UNITS

#### Shade mode

- 0 = black – no reflectance
- 100 = brilliant white - full reflectance

#### **Opacity mode**

- = completely transparent 0
- = fully opague 100

### **Cleanliness mode**

- 0 = No change
- 100 = Maximum change

### **INCLUDED ACCESSORIES**

- Calibration tile with certificate
- USB data cable
- Mini CD containing:
  - Instruction manual
  - Bluetooth data app
  - Example Excel spreadsheets
  - Instructional videos

### EXTRAS

#### FREE EXTENDED WARRANTY

Register for a two year comprehensive guarantee.

#### 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, please visit www.rhopointinstruments.com/support for detailed information.

## Certificate no: FM 29741 ISO 9001:2008 MRE BRITISH COATINGS FEDERATION

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