wave-scan II

The specialist for high gloss surfaces

Surface appearance changes with the size and distinctness of structures. The wave-scan II objectively evaluates orange peel as well as brilliance of topcoat finishes.

Objective and reliable appearance data

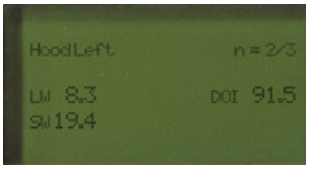
- Excellent correlation to wave-scan DOI
- Classical Longwave and Shortwave
- Structure spectrum to analyze appearance changes
- Dullness and DOI measurement independent of the paint system

Ideal size for the production line

- Easy handling – even on the moving car body
- Small and light weight
- For flat and curved areas, radius > 50 cm
- Scroll wheel operation and multilingual menu
- Scales and scan lengths can be selected directly from menu
- Full statistics with saving in selectable memories
- Large memory for 1500 readings
- USB port for data transfer to PC
- smart-chart software:
  - Organizer files for sample id
  - Data management with SQL Database
  - Standard QC Reports

select mode ...

and measure



Always ready

The orange peel meter is operated with a rechargeable battery pack (Li-Ion). The docking station automatically charges the battery pack and transfers the measured data to the PC.
Optionally, the wave-scan II can be operated with 3 standard mignon alkaline or rechargeable batteries – good for 1000 readings.

Ordering Information

Cat. No.	Description
4846	wave-scan II

Comes complete with:
Orange peel meter with protective cover,
Certificate,
Checking tile,
smart-chart software,
Docking station with USB-cable,
2 rechargeable Li-Ion battery packs,
Battery holder for AA alkaline batteries,
3 Batteries, Operating manual,
Carrying case,
Training

Extended Warranty: see pages about Technical Service

System requirements:
Operating system: Windows 7 SP1 or 8.1
Microsoft® .NET Framework 4
Hardware: Core 2 Duo, 2.2 GHz; i7, 2.5 GHz recommended, or equivalent
Memory: 4 GB RAM, 8 GB recommended
Hard-disk capacity: min. 300 MB
Monitor resolution: 1280 x 1024 pixel or higher
Disk drive: CD-ROM or DVD drive
Interface: free USB-port

Technical Specifications

Application	
High Gloss Surfaces	du < 40, linear range
Structure Spectrum	
du	< 0.1 mm
Wa	0.1 to 0.3 mm
Wb	0.3 to 1 mm
Wc	1 to 3 mm
Wd	3 to 10 mm
We	10 to 30 mm
Repeatability [1]	4% or > 0.4
Reproducibility [1]	6% or >; 0.6
Object Curvature	radius > 500 mm
Min. Sample Size	35 mm x 150 mm
Scan Length	5 / 10 / 20 cm
Resolution	375 points/cm
Memory	1500 readings
Interface	USB port
Languages	English, French, German, Italian, Japanese, Portuguese, Spanish
Light Source	Laser diode
Laser Energy	< 1 mW (Laser class 2)
Dimensions	150 x 110 x 55 mm (5.9 x 4.3 x 2.2 in.)
Weight	650 g (1.5 lbs)
Power Supply	rechargeable battery pack or 3 AA alkaline batteries approx. 1000 readings
Temperature Range	operation: +10°C to 40°C (+50°F to 104°F) storage: 0°C to 60°C (+32°F to 140°F)
Rel. Humidity	up to 85% at 35°C (95°F), non-condensing

[1]Standard deviation

Training for wave-scan II

BYK-Gardner offers you more than just an instrument. We assist you in operating the wave-scan system and understanding your appearance readings. As a result you will be able to use the orange peel meter to save time and money and at the same time improve your quality. Therefore, the instrument comes with a one day training course including:

1. Orange Peel and DOI Theory

- Visual perception and instrumental measurement of Orange Peel and DOI
- Data interpretation: How can the structure spectrum be used to optimize process and material parameters

2. Operation and Software Training

- Set-up of an "Organizer" to create a routine measurement procedure
- Programming of the instrument with "organizer" and measurement of several samples
- Direct data transfer to Excel for documentation of individual readings
- Data transfer to smart-chart software and saving in a database for routine QC
- Data analysis using standard QC-reports:
  - Summary by lines to show at one glance how various colors are running at different paint lines
  - Trend chart to show how specified zones perform over a defined time range
  - SPC-chart for daily process control of your critical colors and highrunners: xR-chart
  - Zone profile for trouble shooting using the structure spectrum
- Create your own reports in Excel®
  - Transfer data from the database to Excel
  - Pivot function to define layout in Excel
- The training can be performed in one day or two half days. It is recommended to split the training into two half days:

Day 1: Theory and basic operation (set-up organizer, taking readings and saving data in a database)

Day 2: 3-4 weeks later to ensure readings were taken and saved in a database. Data analysis and standard QC reports can be explained using customer specific data.

Ordering Information

Cat. No.	Description
4847	Checking tile wave-scan II
4841	Docking Station, for 4840/4846
4842	Battery Pack, for 4840/4846
4831	Software smart-chart

Accessories

	Replacement – please contact your local service department for replacement of your checking tile.
	Incl. USB interface cable and recharger 100 - 240 V self adapting
	Rechargeable battery for automatic charge in docking station
	Software for professional analysis and documentation of color and appearance

Certified

Please refer to section Preventive Maintenance.