

Colorimeter



Colorimeter MSCDN300SWISS

Product Overview

The **MSCDN300SWISS Colorimeter** is a compact and highly efficient device designed for accurate and reliable color measurement. Its ergonomic design ensures convenient operation and ease of use, while advanced software and power management features provide added functionality and long-lasting performance. This colorimeter is ideal for a wide range of applications, including color difference analysis, chromaticity indexing, and

database management of color samples.

Key Features

1. Human-Centric Design and Operation

- Ergonomic structure ensures comfortable handling.
- Auto white and black calibration at startup simplifies usage.

2. Stable Measurement Performance

- High precision and repeatability for consistent results.
- Stable detector performance with silicon photoelectric diode technology.

3. Advanced PC Software (CQCS3)

- Password-protected software for security.
- Functionality includes:
 - **Color difference analysis.**
 - **Cumulative color difference analysis.**
 - **Chromaticity indexing.**
 - **Color sample database management.**
 - **Simulating object colors.**

4. Efficient Power Management

- High-capacity rechargeable lithium-ion battery.
- More than 3,000 measurements per charge.
- Long lamp life, exceeding 1.6 million measurements.

5. Fast and Convenient Operation

- Quick locating feature for ease of use.
- TFT LCD display for clear data visualization.

Technical Specifications

Feature	Details
Model	MSCDN300SWISS
Illuminating/Viewing Geometry	8/d
Measuring Aperture	ø8mm
Detector	Silicon photoelectric diode
Color Space	CIE LabCh*, CIE Lab*, CIE XYZ
Color Difference Formula	ΔE_{ab} , ΔL_{ab} , ΔE_{C^*h}
Light Source	D65
Light Source Device	LED blue light excitation
Display	TFT LCD
Errors Between Equipments	$\Delta 0.50 \Delta E_{ab}$
Storage Capacity	100 standards, 20,000 samples
Repeatability	Standard deviation within ΔE_{ab} 0.08
Lamp Life	5 years, over 1.6 million uses
Charging Time	2 hours (8 hours for first charge)
Measurement Times Before Recharge	3,000 measurements (in 8 hours)
Operating Temp./Humidity Range	-10~40°C, 0-85% RH (no condensation)
Data Interface	USB

Feature	Details
Optional Accessories	Universal Test Components, Powder Test Box, Miniature Thermal Printer
Power Supply	Rechargeable Li-ion battery (3.7V @ 3200mAh)
External Size (W×D×H)	205×70×100 mm
Package Size (W×D×H)	370×170×310 mm
Net Weight	0.45 kg
Volume Weight	3 kg

Applications

The MSCDN300SWISS Colorimeter is suitable for industries requiring precise color measurement and analysis, such as:

- Textiles and clothing.
- Paints and coatings.
- Plastics and polymers.
- Printing and packaging.
- Food and beverages.

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