

## 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
<b>Model</b>	MSCDN300SWISS
<b>Illuminating/Viewing Geometry</b>	8/d
<b>Measuring Aperture</b>	ø8mm
<b>Detector</b>	Silicon photoelectric diode
<b>Color Space</b>	CIE LabCh*, CIE Lab*, CIE XYZ
<b>Color Difference Formula</b>	ΔE <sub>ab</sub> , ΔL <sub>ab</sub> , ΔE <sub>C</sub> <sup>h</sup>
<b>Light Source</b>	D65
<b>Light Source Device</b>	LED blue light excitation
<b>Display</b>	TFT LCD
<b>Errors Between Equipments</b>	Δ0.50 ΔE <sub>ab</sub>
<b>Storage Capacity</b>	100 standards, 20,000 samples
<b>Repeatability</b>	Standard deviation within ΔE <sub>ab</sub> 0.08
<b>Lamp Life</b>	5 years, over 1.6 million uses
<b>Charging Time</b>	2 hours (8 hours for first charge)
<b>Measurement Times Before Recharge</b>	3,000 measurements (in 8 hours)
<b>Operating Temp./Humidity Range</b>	-10~40°C, 0-85% RH (no condensation)
<b>Data Interface</b>	USB

<b>Feature</b>	<b>Details</b>
<b>Optional Accessories</b>	Universal Test Components, Powder Test Box, Miniature Thermal Printer
<b>Power Supply</b>	Rechargeable Li-ion battery (3.7V @ 3200mAh)
<b>External Size (WxDxH)</b>	205x70x100 mm
<b>Package Size (WxDxH)</b>	370x170x310 mm
<b>Net Weight</b>	0.45 kg
<b>Volume Weight</b>	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.

**MSCDN300SWISS Colorimeter**\_\_\_\_\_