



CC-m
Portable Spectrophotometer

Quality color measurement within your grasp

CC-m is a Portable Spectrocolorimeter.

It is great for measuring the surface of large specimens on site. Its vertical structure allows the user to use it in nearly any situation, such as measuring in narrow spaces and measuring rough surfaces. Its large color LCD touch panel makes it easy to read, prevents mistakes, and reduces fatigue. The light source is SUGA's distinctive VI-LED (High color-rendering index white LED) with long lifespan and light suitable for color measurement. Its dual synchro sensor method with two spectrosopes gives it an outstanding long-term stability.

Visibility

- Easy to read
- Prevents mistakes
- Reduces fatigue

Operability

- Simple to use
- Reduces operator error
- Intuitive

Reliability

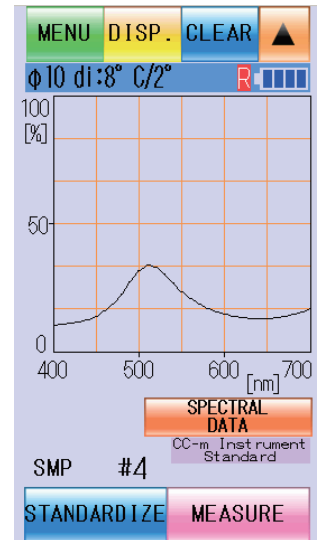
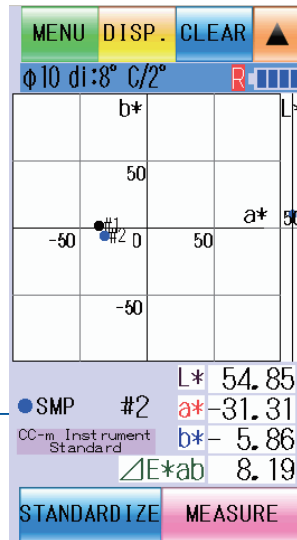
- Stable long term measurements
- VI-LED 20,000,000 flashes
- Stability less than 0.04 ΔE^*ab



Easy to see large-screen color LCD

The icons are large and visible with a 4.3 inch large-screen color LCD. The measurement results are displayed on a large graph making them easily visible for all users.

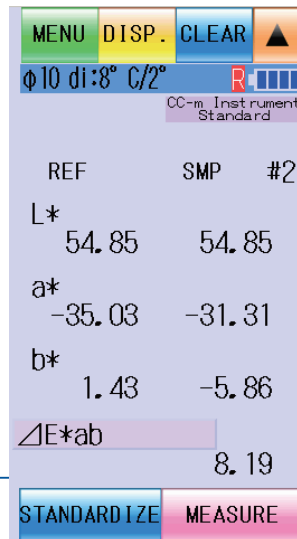
Select from:
CIE LAB, CIE LAB color difference, spectral reflectance, CIE Yxy, Lab(h), Lab(h) color difference



Operability with special attention to usability

All the necessary functions can be found at the main menu, allowing the user to operate with minimal amount of button-pressing. The **(m)** button on the side of the device allows the user to perform the three most commonly used features (zero standardization, full scale standardization, and measurement).

All navigation begins at this single screen.



Stability greatest of its class

The dual synchro sensor method simultaneously observes the reflective light from the sample and the lamp's light energy, wavelength by wavelength. The light source is SUGA's distinctive VI-LED (high color-rendering index white LED) with a lifespan of up to 20,000 hours (20 million measurements), which produces light all across the visible spectrum, as opposed to the traditional white LED. These features and superb reliable electronics makes the instrument perform with outstanding long term stability.

THE
DUAL SYNCHRO
SENSOR METHOD

+

VI-LED
(High color-rendering
index white LED)

||

LONG-TERM STABILITY
Standard deviation of ΔE^*ab within 0.04.

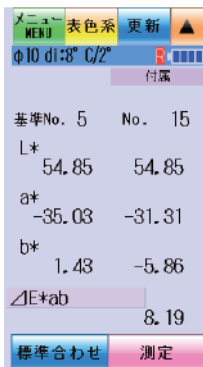
Measurement Systems

CIE LAB, CIE LUV, Spectral reflectance, CIE XYZ, CIE Yxy, Hunter LAB, Munsell values, JIS colorfastness grade, whiteness index, yellowness index, change in yellowness index, pass/fail, color difference graphs.

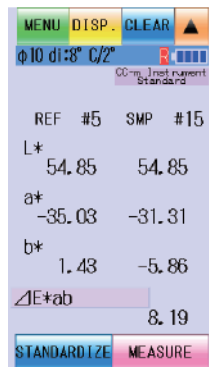
Specifications

Measurement conditions	A, C, D ₅₀ , D ₆₅ , D ₇₅ , F ₂ , F ₆ , F ₇ , F ₈ , F ₁₀ , F ₁₁ , TL ₈₄ , UL ₃₀ (2° and 10° observer angles)
Geometry	Diffuse light source, 8° observer angle (switchable between de:8° and di:8°), reflectance measurement
Measurement aperture diameters	10 mm, 5 mm
Photometry	Dual synchro sensor method
Wavelength range	400 – 700 nm, 10 nm interval
Light source	VI-LED (High color-rendering index white LED)
Stability	The standard deviation of ΔE^*ab within 0.04 (measuring a white standard 30 times consecutively)
Dimension	Approx. 82(W) × 112(D) × 248(H) mm [weight: 980g]
Power capacity	3.7V rechargeable lithium-ion battery
Charging time	Approx. 7 hours (capable of approx. 1000 measurements at full charge)
Battery charger	AC 100 – 250V 50/60Hz 0.5A
Interfaces	USB2.0 miniB
Data storage	100 standard data, 1000 samples
Statistics	Average, standard deviation
Standards	JIS Z 8722, JIS L 0809, CIE Pub. No15, ISO 7724, ISO 11664, ISO 105 J01 – 03, ASTM E313, ASTM E308, ASTM E1164

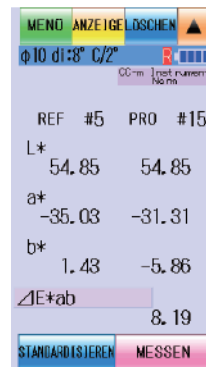
Languages



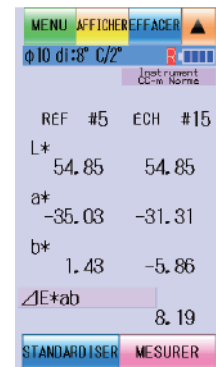
Japanese



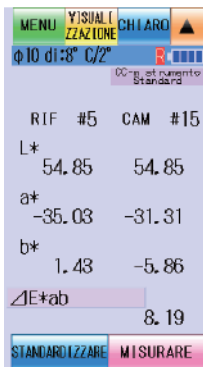
English



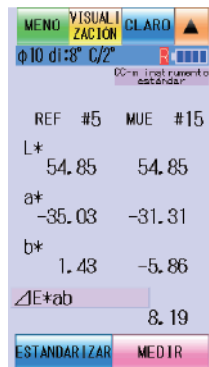
German



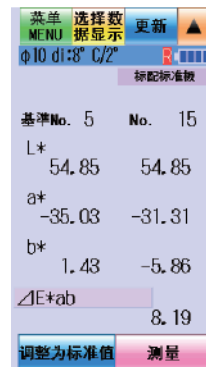
French



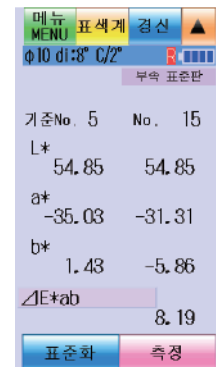
Italian



Spanish



Chinese



Korean

※1 The standard white calibration plaque, used as the standard for measurement values, is traceable to the international standard by National Institute of Advanced Industrial Science and Technology. Accuracy of the instrument is maintained via our JCSS optical calibration technology.

Due to product development and improvement, specifications may be subject to change without notice



Suga Test Instruments Co.,Ltd. www.sugatest.co.jp/english

Our calibration department is conformity with ISO/IEC17025 and is accredited to meet the requirements for MRA of ILAC and APLAC.

ISO/IEC 17025: JIS Q 17025

(General requirements for the competence of testing and calibration laboratories)

MRA: Mutual Recognition Arrangement

ILAC: International Laboratory Accreditation Conference

APLAC: Asia Pacific Laboratory Accreditation Cooperation

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