KONICA MINOLTA

DESIGN AWARD 2018

GERMAN DESIGN AWARD 2019

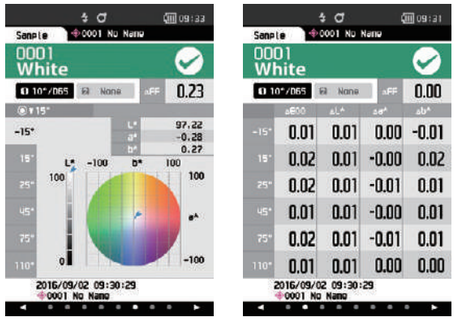
# Spectrophotometer CM-M6

## High precision, multi-angle model for measuring from 6 angles!


The Standard in Measuring Color & Light

Giving Shape to Ideas

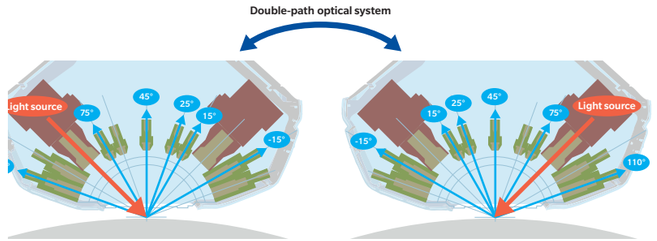
## Display examples




The CM-M6 has a built-in 3.5-inch color LCD that can display measured values both numerically and on colored graphs, for easier visualization of results.

# The CM-M6 is a compact, lightweight, multi-angle spectrophotometer. Incorporating a new patented 'double-path optical system', it exhibits outstanding versatility in various measuring applications.


## Multi-angle measurements (1 light source, 6 viewing angles)




Illumination angle: 45˚
Aspecular viewing angles: -15˚, 15˚, 25˚, 45˚, 75˚, 110˚
* These 6 viewing angles make it possible to detect differences in pearl colors with higher accuracy than previous spectrophotometers.

### Double-path optical system

The CM-M6 has duplicate illumination/viewing systems symmetrical about its center axis. This system ensures high measuring stability even when the instrument is slightly tilted and makes it possible to stably measure R300 curved surfaces like side mirrors.

## Compact, lightweight, vertical format

The compact body (with hand strap) can be stably held with one or two hands. Moreover, it is loaded with features ideal for measuring vehicle exteriors such as a rubber cover around the measurement aperture to safeguard measurement subjects against scratching and Bluetooth® support (option) for sending measurement data to remote devices over wireless connections.

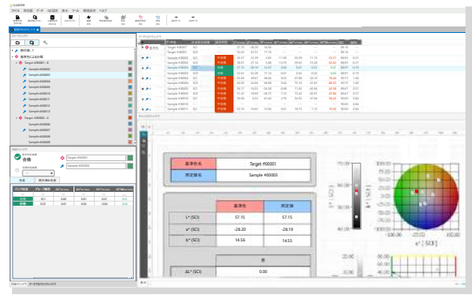
## Ø6 mm diameter viewing beam for measuring small surfaces

The viewing beam is 6 mm in diameter, so small surfaces that were hard to measure with earlier models can be measured.



## (Option) Color Data Software SpectraMagic NX2

SpectraMagic NX2 is color management software that gives users a customizable screen display and a wide range of functions for operating and configuring their spectrophotometers or Chroma Meter from a computer. Users can display data lists and create color difference graphs and spectral graphs to assist in color management that requires judgment based on numerous values and indicators.

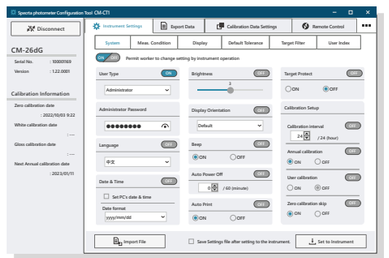


You can see the details in the catalog from the following 2D code. ↓

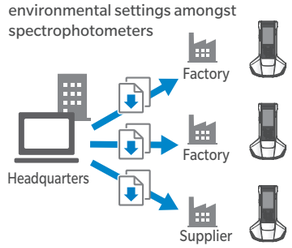
SpectraMagic NX2 web Site

## Quick and easy-to-use Spectrophotometer Configuration Tool CM-CT1 Ver.1.4 or later

The CM-CT1 gives manufacturers the means for easily and quickly setting up their CM-M6 spectrophotometers. Moreover, when multiple devices are used or when the same conditions need to be set amongst multiple factories or suppliers, settings can be compiled into a file and shared.




Easily unify measurement conditions and environmental settings amongst spectrophotometers




**Spectrophotometer Configuration Tool CM-CT1**

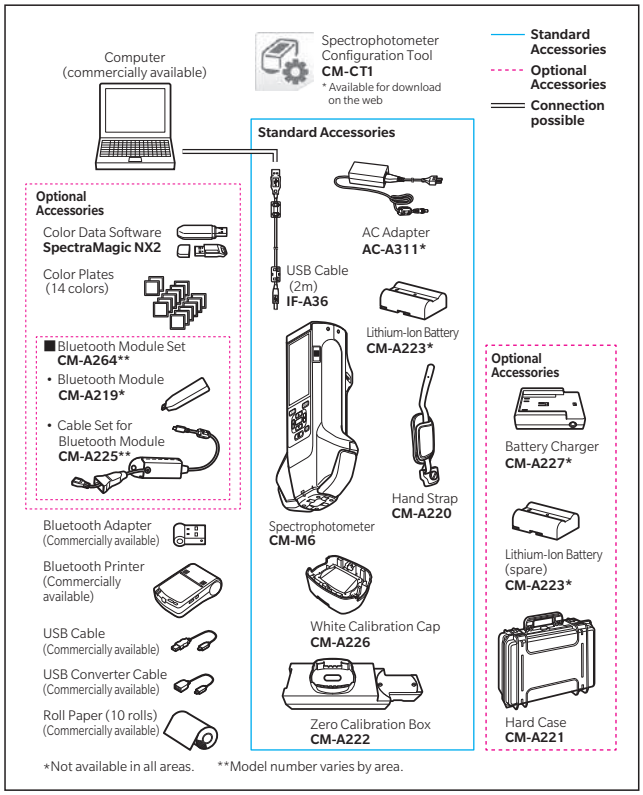
●OS: Windows® 10 Pro 64 bit / Windows® 11 Pro
●CPU: 2.0 GHz equivalent or faster ●Memory: 2 GB or more ●Hard disk: 10 GB or more of free space for installation ●Other: USB port (For connecting to spectrophotometers)

## Main Specifications

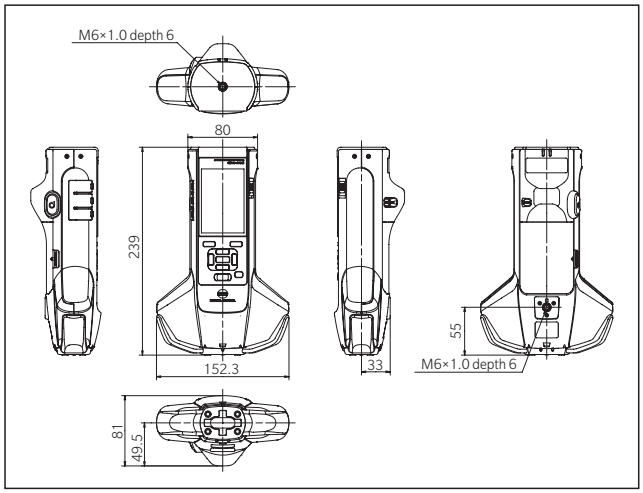
| Model | Spectrophotometer CM-M6 |
|---|---|
| Illumination/viewing system | 45° illumination : -15°/15°/25°/45°/75°/110° aspecular viewing angles with double-path technology |
| Detector | Dual 40-element silicon photodiode arrays |
| Spectral separation device | Linear variable filter |
| Wavelength range | 400-700 nm |
| Wavelength pitch | 10 nm |
| Measurement range | 6 angles: 0-600%; Output/display resolution :0.01 % |
| Light source | High-CRI white LED |
| Measurement time | Approx. 4.5 seconds |
| Minimum measurement interval | Approx. 5 seconds |
| Battery performance | Approx. 1,500 measurements/charge (at 10-second intervals at 23°C) |
| Measurement/ illumination area | Ø6 mm/Ø12 mm |
| Repeatability | Chromaticity value :Standard deviation within ΔE*ab 0.05 (When a white calibration plate is measured 30 times at 10-second intervals after white calibration) |
| Inter-instrument agreement | Within ΔE*ab 0.2 (Average for 12 BCRA Series II color tiles compared to values measured with a master body under Konica Minolta standard measurement conditions) |
| Observer | 2 ° or 10 ° Standard Observer |
| Illuminant | A, C, D50, D65, F2, F6, F7, F8, F10, F11, F12 User illuminant*1 (simultaneous evaluation with two illuminants possible) |
| Displayed data | Colorimetric values, color-difference values/graph, line graph (colorimetric/color-difference values), pass/fail judgement |
| Colorimetric data | L*a*b*, L*C*h |
| Indexes | MI, FF value (Flop value) |
| Color-difference formula | ΔE*ab (CIE 1976), Δ(L*a*b*), Δ(L*C*H*), CMC (l:c), ΔE*94 (CIE 1994), ΔE00 (CIE DE2000), ΔE(DIN 6175), ΔE99o(DIN 99o), ΔE(Audi 2000) |
| Data memory | Target data: 200 measurements; Sample data: 800 measurements |
| Pass/Fail judgement | Tolerances can be set for color-difference values |
| Displayed languages | Japanese, English, German, French, Italian, Spanish, Chinese (Simplified), Portuguese, Russian, Turkish, Polish |
| Display | 3.5-inch TFT color LCD |
| Interfaces | USB2.0, Bluetooth® (SPP compatible. Using optional Bluetooth Module.) |
| Power | Rechargeable lithium-ion battery (removable), dedicated AC adapter |
| Charging time | Approx. 5 hours when no charge remains |
| Operation temperature/ humidity range | 0-40 °C, relative humidity is 85% or less (at 35 °C) with no condensation |
| Storage temperature/ humidity range | -20-45 °C, relative humidity is 85% or less (at 35 °C) with no condensation |
| Size (W×H×D) | Approx. 152 × 239 × 81 mm |
| Weight | Approx. 1.1 kg (Including battery) |

*1 : Optional Color Management Software SpectraMagic NX2 Pro is required for setting user-configured illuminants.

## System Diagram




## Dimensions (Units : mm)

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- The specifications and appearance shown herein are subject to change without notice.

### SAFETY PRECAUTIONS

For correct use and for your safety, be sure to read the instruction manual before using the instrument.

- Always connect the instrument to the specified power supply voltage. Improper connection may cause a fire or electric shock.
- Be sure to use the specified batteries. Using improper batteries may cause a fire or electric shock.

ISO Certifications of KONICA MINOLTA, Inc., Sakai Site

ISO 9001 — JQA-QMA15888 Design, development, manufacture/ manufacturing management, calibration, and service of measuring instruments

ISO 14001 — JQA-E-80027 Design, development, manufacture, service and sales of measuring instruments


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