KONICA MINOLTA

## News Release

# Konica Minolta to Launch the CM-17d, a Portable, Vertical, Lightweight Spectrophotometer Capable of High-accuracy Measurement in Any Situation

### Increasing the Work Efficiency and Realizing Advanced Color Management by Improving Operability and Functionality

Tokyo (June 5, 2024) - Konica Minolta, Inc. (Konica Minolta) today announced that the Company will launch the CM-17d and CM-16d vertical, lightweight, portable spectrophotometers capable of high-accuracy measurement in any situation, in the summer of 2024.

The CM-17d and CM-16d are the successor models of the CM-700d and CM-600d vertical portable spectrophotometers that have been introduced in large numbers globally to development and production sites in various fields. The CM-17d features an electronic viewfinder, which is a new function, to facilitate positioning, while the CM-16d is characterized by high cost performance in pursuit of simplicity. These models excel at measuring small samples and those with a curved surface and enable data to be managed remotely through a wireless connection. Thus, they can be used in various work environments.

These products enhance the work efficiency and realize advanced color management in quality control, production, and R&D in various fields, including automobiles, electrical equipment and smartphones, cosmetics, paints, plastics, construction materials, and textiles.

**Value Proposition of the CM-17d Spectrophotometer**

**1. Design and functionality in pursuit of user friendliness**

The CM-17d is designed to ensure user friendliness in any situation, such as working with one hand, and measuring small samples and those with a curved surface. The model is equipped with a camera viewfinder,[*1] which was not provided on conventional models, to enable easy positioning for measurement. The ergonomically designed grip is easy to hold, and the operation display is tilted to improve visibility. Wireless connection[*2] by wireless LAN and Bluetooth enables data to be managed remotely. These features make the model convenient to use in various work environments.


## 2. Improving the measurement accuracy while maintaining compatibility with the previous model

The CM-17d offers improved measurement accuracy while maintaining data compatibility with the previous model, the CM-700d. In addition, differences in measurement values between instruments have been reduced by about 40%, and the measurement time has been reduced by about 30%[*3] from the previous model. Thus, the CM-17d realizes advanced color management and helps increase the work efficiency.

## 3. Functions and software that increase the efficiency and ensure reliability

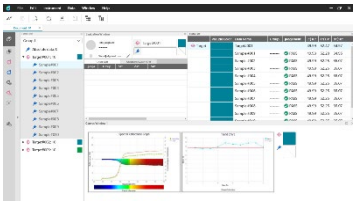
### (1) Cradle for increased work efficiency

The cradle[*4] is used for charging, and also serves as a zero-calibration box. A white calibration cap can be installed in the front. The CM-17d can be placed on the cradle for charging after work or between measurements, eliminating the inconvenience of running out of battery power during measurement or working while charging using a cable. Zero-calibration can be performed at the start of measurement while keeping the product placed on the cradle. This increases the work efficiency.

### (2) Wavelength compensation function for high stability

The CM-17d is equipped with a Wavelength Analysis & Adjustment (WAA) function, which compensates for wavelength deviation of the spectrometer due to external factors, such as impact during use and changes in ambient temperature. The WAA function is free for the first year after purchase of the CM-17d, after which it is possible to continue to use the function by getting the inspection and calibration services. The product can be reliably used while maintaining accuracy in combination with annual calibration (maintenance).

### (3) Color data management using the SpectraMagic NX2 color management software



The SpectraMagic NX2[*5] color management software enables color management and data classification using various color indices and graphs, evaluations using light source information in the actual environment, and communication with suppliers and customers based on color values.

**Main Specifications**

The descriptions, specifications, and appearance are subject to change without notice.

| | CM-17d | CM-16d |
|---|---|---|
| Illumination/ viewing system | di: 8°, de: 8° (diffused illumination, 8° viewing angle), SCI (specular component included)/SCE (specular component excluded) switchable automatically | |
| Measurement/ Illumination area | MAV: Φ8 mm/Φ11 mm | MAV: Φ8 mm/Φ11 mm |
| | SAV: Φ3 mm/Φ6 mm | |
| | *Changeable by replacing the target mask and switching the lens position | |
| Repeatability | Colorimetric values: Standard deviation within ΔE*ab 0.02 | Colorimetric values: Standard deviation within ΔE*ab 0.04 |
| | (When a white calibration plate is measured 30 times at 5-second intervals after white calibration under Konica Minolta standard measurement conditions) | (When a white calibration plate is measured 30 times at 5-second intervals after white calibration under Konica Minolta standard measurement conditions) |
| Inter-instrument agreement | Within ΔE*ab 0.12 (based on average for 12 BCRA Series II color tiles) | Within ΔE*ab 0.2 (based on average for 12 BCRA Series II color tiles) |
| | (MAV/SCI. Compared to values measured with a master body under Konica Minolta standard measurement conditions) | (MAV/SCI. Compared to values measured with a master body under Konica Minolta standard measurement conditions) |
| Size (W×H×D) | Approx. 79 × 230 × 128 mm | |
| Weight | Approx. 700 g (including the lithium-ion battery) | Approx. 660 g (including the lithium-ion battery) |

**About Konica Minolta's Sensing Business**

Konica Minolta's Sensing Business offers various products and solutions in the fields of light source color measurement and object color measurement based on the optical technologies developed in its former camera business and continually refined thereafter. The products and solutions offered by Konica Minolta contribute to ensuring quality and improving productivity at customers' manufacturing sites, and many products are used as de facto standard color measurement instruments. Notably, Konica Minolta has more than a 50% share in the global market for display image quality measurement and inspection (estimated by Konica Minolta), and has a solid presence as the market leader.

Konica Minolta has actively promoted investments to strengthen its competitiveness. In 2012, the Company acquired Instrument Systems GmbH (Germany) which develops high-end optical measuring instruments and has an outstanding track record in the high-performance measurement of displays and LED lighting devices. In 2015, the Company acquired Radiant Vision Systems, LLC (U.S.) which excels at high-resolution 2D measurement instruments for displays, image processing software, and automatic appearance inspection systems. In 2019, the Company acquired Eines Systems

(Spain), a market leader in the field of visual inspection of automobiles. In 2020, the Company acquired Specim, Spectral Imaging Ltd. (Finland), a leading company in the field of hyperspectral imaging (HSI*6).

In the Industry Business, including the sensing business, Konica Minolta's development, manufacturing, and customer support have come together to co-create value by building strong relationships with customers with core technology as its strength. The Company has set the fields it will focus on in the future as "display," "mobility," and "semiconductor manufacturing," strategically invest mainly in the strengthening businesses of sensing, performance materials, IJ components, and optical components (industrial applications), and promote business development that is more closely linked to the customer's manufacturing value chain.

*1: Only the CM-17d is equipped with a camera viewfinder.
*2: A WLAN/Bluetooth module, an optional accessory, is required for wireless connection.
Bluetooth is a registered trademark of The Bluetooth SIG, Inc. and is used based on the license.
*3: During measurement in SCI or SCE
*4: The cradle is a standard accessory for the CM-17d and is an optional accessory for the CM-16d.
*5: The SpectraMagic NX2 is optional software.
*6: HSI is a method that uses a camera with narrow bandwidth over a wide spectral range from the visible to mid-infrared wavelength region to identify substances in an area. It is expected to be used for applications such as recycling, material/resource identification, food analysis, environmental safety, product surface condition analysis, etc.

*All the images are for reference only.



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