

## **FAST SPECTROPHOTOMETRIC COLOR-METER**

### **CMS-35SP/CMS-35FS**

The CMS-35 systems are based on a high-level optical design and quality control, providing improvement in repeatability and reproducibility of the measurement values.



The CMS-35SP is suitable for use in the R&D lab and the manufacturing floor. There are also application cases in which CMS-35SP is used as the sensor of the data-sharing computer color matching systems in several companies.

### **Applications**

- Color management of color materials, including dye, pigment and printing ink, plastics, etc.
- Spectral color measurement used in the calculation of the CCM recipe in color mixing industry, including dyeing, painting, and coloring resins.
- Investigating color difference in painting, dyeing and coloring resins.
- Achievement of color correction information of the batch color comparing to a standard color guide
- Investigation on the reasons that result in metamerism

The CMS-35FS features an optical fiber allowing measurements to be made under difficult geometries and configurations. Exchangeable flexible sensor heads are available, allowing measurement for very small or uneven samples. Accurate positioning measurement is available by using an optional stand.



### <CMS-35FS>

#### **Applications**

- Color measurement of tissues of human bodies, animals or plants, such as the skin, gum, or teeth - just about anywhere you can get the sensor head.
- Color measurement for the manufacturing control of tile, synthetic resin, plywood, or any complex material requiring a color specification
- Color measurement in the production of foods such as caramel or soy sauce, including solids and liquids
- Color management in the production of the color material, painted surface or paper
- Color management in the manufacturing process of the metal plate or gilded surfaces.
- Color measurement on the pharmacy production process, tablet and injection

## **CMS-35SPC**



The CMS-35SPC is designed for measuring the reflection and transmittance, equipped with an integrating sphere for the source of diffuse illumination. The double beam design provides precise and stable measurements. The specimen table can be placed vertically or horizontally, allowing fast and easy placement of samples and making much more efficient use of the operator's time. The CMS-35SPC can measure the samples with remarkably low spectral reflectance or transmittance, making it ideal for the color management of deep, saturated colors.

### **Applications**

- Color Management of dyestuff, pigments, paints and printing ink.
- Managing coating colors, coloring and colors for resins and steel sheets.
- Managing colors for dyeing resins.

## Specifications

	CMS-35SP	CMS-35FS	CMS-35SPC
Illuminating and Viewing Geometry	<p><b>For Reflection</b>                      Eight-degree geometry, Specular component selectable between being included or excluded (di:8° or de:8°)</p> <p><b>For Transmittance</b>                      Diffuse/normal geometry Regular component included (di:0°)</p>	Annular/normal geometry	<p><b>For Reflection</b>                      Eight-degree geometry, Specular component selectable between being included or excluded (di:8° or de:8°)</p> <p><b>For Transmittance</b>                      Diffuse/normal geometry</p>
Measured Area	<p><b>For Reflection</b>                      12×17mm/3×6mm                      *Selectable</p> <p><b>For Transmittance</b>                      Diameter 22mm</p>	<p><b>1.6mm diameter</b>  <b>3mm diameter</b>  <b>5mm diameter</b>  <b>12mm diameter</b></p>	<p><b>For Reflection</b>                      7.5×15mm(L)/4×8mm(S)                      *Selectable</p> <p><b>For Transmittance</b>                      Diameter 10mm</p>
Light Source	Halogen Lamp 12V/50W	Halogen Lamp 12V/50W	Halogen Lamp 12V/50W
Dispersing Element	Concave Diffraction Grating	Concave Diffraction Grating	Concave Diffraction Grating
Spectral Range	390 nm-730 nm	390 nm-730 nm	390 nm-730 nm
Wavelength Interval	10 nm	10 nm	10 nm
Spectral Bandpass	Approximately 10 nm	Approximately 10 nm	Approximately 10 nm
Detector	Silicon Photodiode Array	Silicon Photodiode Array	Silicon Photodiode Array
Power Requirements	100V AC, 50/60Hz, 3A	100V AC, 50/60Hz, 3A	100V AC, 50/60Hz, 3A
Dimensions	L542×W320×H300 mm	L400×W350×H245 mm	L500×W500×H300 mm

**MURAKAMI COLOR RESEARCH LABORATORY**  
3-11-3 Kachidoki, Chuo-Ku, Tokyo, 104-0054 Japan  
TEL: +81-3-3532-3011 FAX: +81-3-3532-2056

Weight	Approximately 20 kg	Approximately 17 kg	Approximately 20kg
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In the USA, contact:  
Avian Technologies LLC  
116 Newport Road, The Carriage House  
New London, New Hampshire 03257-0092  
Tel: (01) 603-526-2420 Fax: (01) 603-526-2729  
[info@aviantechnologies.com](mailto:info@aviantechnologies.com)