KONICA MINOLTA

| Capable of measuring small target areas | Non-contact measurement | High speed and accuracy |

KONICA MINOLTA

The Standard in Measuring Color & Light

Giving Shape to Ideas
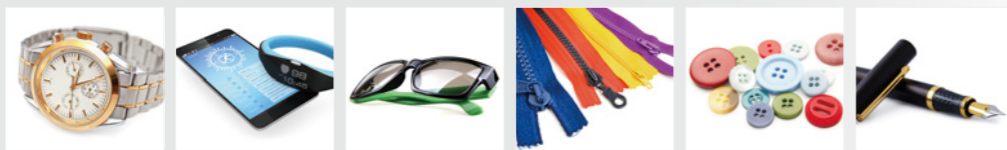
Capable of measuring small target areas

Capable of measuring targets as small as 0.75×1 mm, the CF-300 can be used to measure the color of watch screws, small parts for smartphones and game consoles, etc.

The view pointer makes it easy to identify the measurement area, effectively reducing the likelihood of measurement errors.

<Benefits>

● Measuring colors of small target areas such as watch dial faces and bands, smartphone parts, eyeglass frames, fasteners, buttons, fountain pens, etc.

Non-contact measurement

The CF-300 employs an integrating sphere that allows colorimetric measurements to be conducted at a distance of 1 mm from the target object.

Integrating-sphere-based measurements makes the CF-300 interchangeable with general spectrophotometers.

<Benefits>

● Measuring colors of cosmetics such as lipstick or foundation, paints or other targets that could stain the instrument during contact measurements.

High-speed measurement

Requiring only about 0.1 sec per measurement and capable of continuous measurement at a minimum interval of about 0.2 sec, the CF-300 can perform 5 measurements per second*.

* For high-speed measurement use, the software must be customized to the customer's line conditions.

<Benefits>

● Improving efficiency of quality control via high-speed non-contact measurements on production lines.
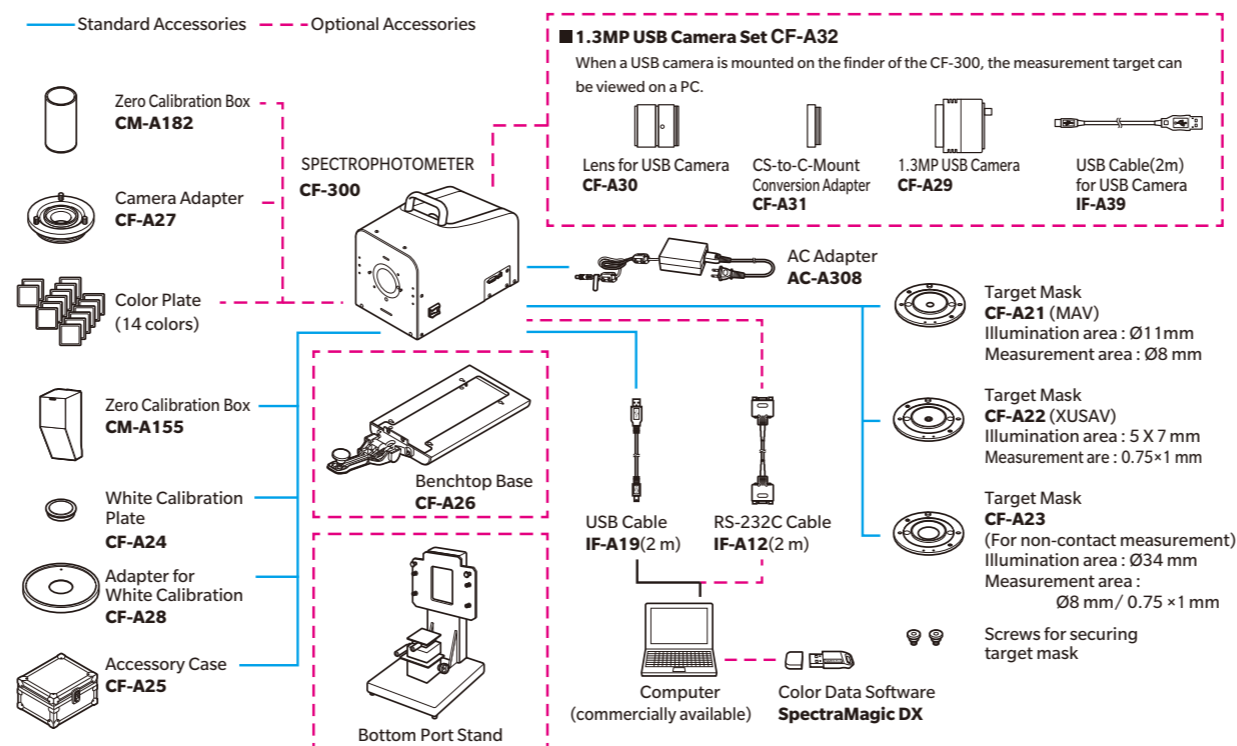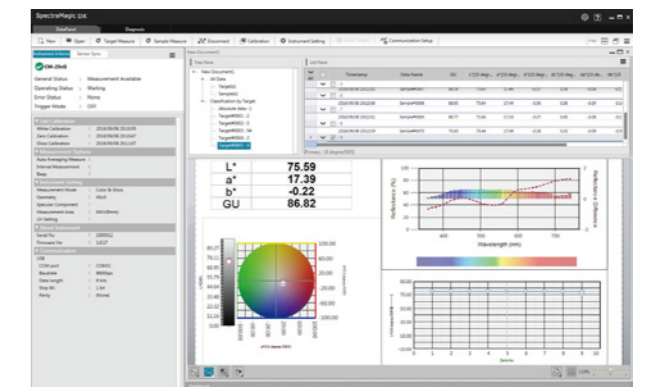

Example configurations

Benchtop Base

Bottom Port Stand

System Diagram

— Standard Accessories   − − Optional Accessories

■ 1.3MP USB Camera Set CF-A32
When a USB camera is mounted on the finder of the CF-300, the measurement target can be viewed on a PC.

Zero Calibration Box
CM-A182

Camera Adapter
CF-A27

Color Plate
(14 colors)

Zero Calibration Box
CM-A155

White Calibration Plate
CF-A24

Adapter for White Calibration
CF-A28

Accessory Case
CF-A25

SPECTROPHOTOMETER
CF-300

Lens for USB Camera
CF-A30

CS-to-C-Mount Conversion Adapter
CF-A31

1.3MP USB Camera
CF-A29

USB Cable(2m) for USB Camera
IF-A39

AC Adapter
AC-A308

Benchtop Base
CF-A26

USB Cable
IF-A19(2 m)

RS-232C Cable
IF-A12(2 m)

Bottom Port Stand

Target Mask
CF-A21 (MAV)
Illumination area : Ø11mm
Measurement area : Ø8 mm

Target Mask
CF-A22 (XUSAV)
Illumination area : 5 X 7 mm
Measurement are : 0.75×1 mm

Target Mask
CF-A23
(For non-contact measurement)
Illumination area : Ø34 mm
Measurement area :
Ø8 mm/ 0.75 ×1 mm

Screws for securing target mask

Computer
(commercially available)

Color Data Software
SpectraMagic DX

* To purchase a bottom port stand, contact a sales office on the back cover.

(Option) Color Data Software SpectraMagic DX Professional Edition (Version 1.2 or later)

The new Color Data Software SpectraMagic DX enables easy management of measurement data, and lets the user configure the screen with objects such as data list, spectral graph, color-difference graph, PASS/FAIL display, etc.

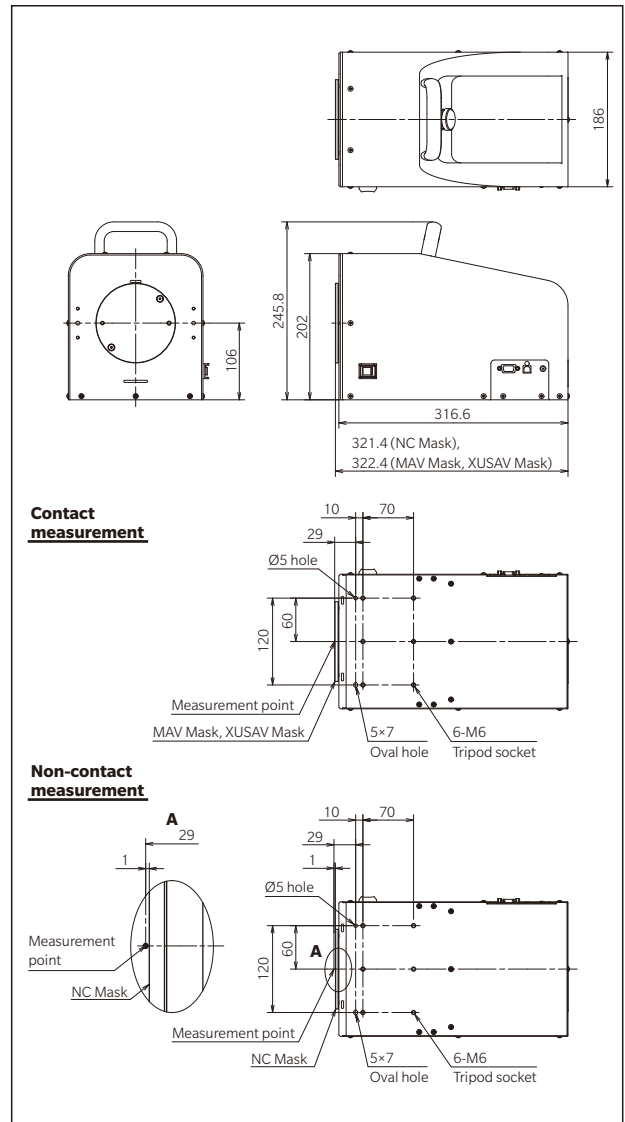|	
OS	: Windows® 7 Pro 32-bit / 64-bit (Windows®7 SP-1 or later) Windows® 8.1Pro 32-bit / 64-bit, Windows® 10 Pro 32-bit / 64-bit
CPU	: Intel® Core i5 2.7GHz or higher (recommended)
Memory	: At least 2 GB (4 GB or more recommended)
Hard disk	: 20 GB of available hard disk space At least 10 GB of available disk space is required on the system drive (drive where the OS is installed) for database.
Display	: Display hardware capable of displaying 1,280 x 768 pixels/16-bit color or better
Other	: USB or serial port required for connection to instrument. USB port required for protection key if used. Not necessary for electronic license.

• Windows® is a trademark or registered trademark of Microsoft Corporation in the USA and other countries.
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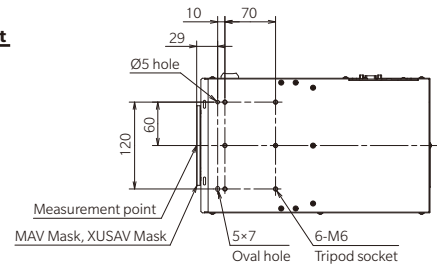
Specifications

Model	Spectrophotometer CF-300					
Illumination/ viewing system	di:8°, de:8° (diffuse illumination: 8° viewing)					
	SCI (specular component included)/SCE (specular component excluded) switchable					
	Conforms to JIS Z 8722 condition c, ISO 7724/1					
Integrating sphere size	ø152 mm					
Detector	Dual 40-element silicon photodiode arrays					
Spectral separation device	Planar diffraction grating					
Wavelength range	400 -700 nm					
Wavelength pitch	10 nm					
Measurement range	0 -175%; Output/display resolution: 0.01%					
Light source	High-CRI white LED					
Illumination area	MAV	ø11 mm	XUSAV	5×7 mm	NC (Non-contact measurement)	ø34 mm
Measurement area		ø8 mm		0.75×1 mm		ø8 mm / 0.75×1 mm
Measurement distance	Contact measurements (MAV/XUSAV target mask): 0.0 mm / Non-contact measurements (NC target mask): 1.0 mm					
Measurement time	Approx. 0.1 seconds					
Minimum measurement interval	Approx. 0.2 seconds					
Repeatability	Chromaticity value: Standard deviation within E*ab 0.02 (When MAV/SCI contact measurements of a white calibration plate are taken 30 times at 1-second intervals after white calibration)					
Inter-instrument agreement	Within E*ab 0.15 (Based on MAV/SCI contact measurements of 12 BCRA Series II color tiles compared to values measured with a master body under Konica Minolta standard conditions)					
Interface	USB 2.0, RS-232C					
Power	Dedicated AC adapter (AC 100 to 240 V, 50/60 Hz)					
Operation temperature/ humidity range	15 - 30°C, relative humidity is 80% or less (at 30°C) with no condensation					
Storage temperature/ humidity range	0 - 40°C, relative humidity is 80% or less (at 35°C) with no condensation					
Size (W×H×D)	Approx. 186 × 202 × 317 mm (Including handle height: 246 mm)					
Weight	Approx. 7.3 kg					
Measurement items*	Various color systems, indices and color-difference formulas are displayed in the windows of the separately sold SpectraMagic DX color management software.					

* For details about measurement items (color systems, indices and color-difference formulas), see the user's guide of the separately sold SpectraMagic DX color management software.
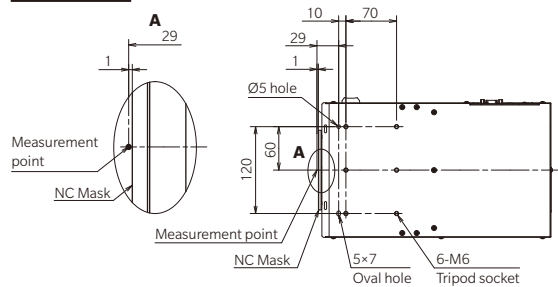
Dimensions (Units:mm)

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