



KONICA MINOLTA

Spectrophotometer **CM-25cG**



A 2-in-1 instrument for measuring
Colour & Gloss simultaneously

Ready for Digital Colour
Data Management

Enhanced form and functions to
measure interior trims and materials

Giving Shape to Ideas

Maximum versatility and industry best accuracy levels

A compact handheld spectrophotometer with 45°:0° geometry and high performance 60° gloss sensor for simultaneous colour and gloss measurements with a number of “world first” features

Equipped with dual measurement capabilities – simultaneously capturing both colour and gloss – the CM-25cG is a high-precision spectrophotometer combining a compact, lightweight design with superior accuracy, making it ideal for industries requiring stringent colour consistency and gloss measurement. The CM-25cG ensures unparalleled efficiency and reliability in quality control and production workflows. Its ergonomic design, high-speed performance, and seamless compatibility with colour management software make it a preferred choice for automotive, plastics, coatings, and textiles sectors.



A two-in-one model for colour and gloss

The CM-25cG measures both colour and gloss with a single press of the measuring button. This greatly improves work efficiency by eliminating the need to switch between two instruments – one for colour, one for gloss – for each measurement, thus reducing takt time, and providing colour and gloss data from exactly the same measurement point for more accurate quality control.

Changeable apertures for medium and small size allow colour and gloss measurement of small and even curved samples.

Colour: Ø8 mm/ Ø3 mm

Gloss: Ø10 mm/ Ø3 mm

Enhanced form and functions for automotive interior materials

With its lightweight, sleek and ergonomic design, extremely fast measurement speed of just 1 second and optional Bluetooth® wireless data communication, the CM-25cG is perfectly suited for use in a production environment. Sample viewing port and measurement buttons on both sides of the body enhance usability under all conditions.



High repeatability and user friendliness



By using a 45°:0° illumination / viewing system with ring-shaped illumination having light sources radially located at certain intervals, the CM-25cG provides stable data while minimising instrument rotational effects. The system also provides data with high accuracy and repeatability even if there is a small gap between the measurement aperture and the subject.



Measuring button

Viewing port

Other features include high-speed measurement, cable-free operation, and viewing ports and measuring buttons on both the right and left sides of the instrument body for easy operation and high measurement stability in any situation.

*Level of subject visibility through viewing port depends on measurement subject.

High inter-instrument agreement

The CM-25cG offers high inter-instrument agreement of within ΔE^* 0.15 (typical) (MAV) for colour and ± 0.2 GU for gloss measurements of 1 to 10 GU. This high inter-instrument agreement enables digital colour communication for more efficient quality control among your factories or between your company and your partners.

New enhanced work efficiency improvement function



Standard colour automatic selection function

When this function is set, the optimum target colour candidates for comparison from among the target colours registered in advance are automatically displayed after sample measurement. This makes it easy to determine the appropriate target colour.

Even when various colours are measured in the inspection process in the automobile industry, etc., there is no need to manually reset the target colour before measurement. The target colour can be easily selected from the candidates displayed after measurement.

This function can shorten the inspection time.

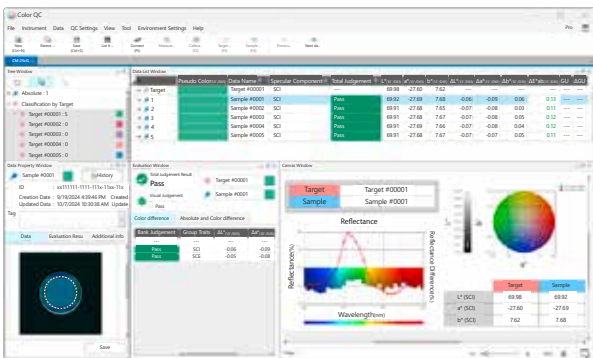
Job function

You can set the work procedure according to the inspection work flow on your device by using the optional SpectraMagic™ NX2. For example, by registering the measurement part and measurement procedure on the device together with the explanatory image, the operator can perform the work according to the procedure displayed on the device. It is especially effective for repeated measurement work for inspection.



Colour Data Software SpectraMagic™ NX2

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



You can see the details in the catalogue using the following QR code. ↓

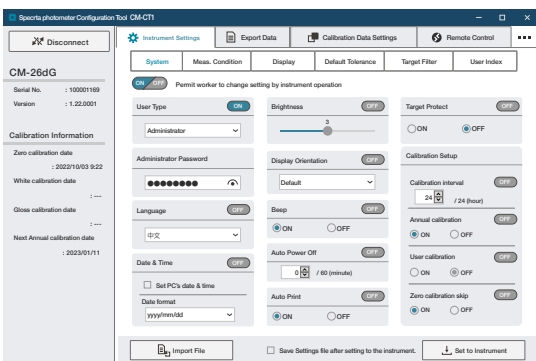
[Site web SpectraMagic NX2](#)



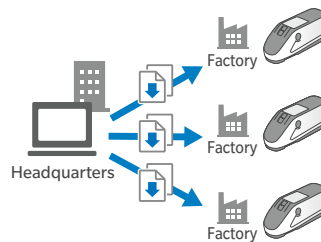
Spectrophotometer configuration tool CM-CT1

The CM-CT1 gives manufacturers the means for easily and quickly setting up their CM-25cG Series 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. Setting of User Index*¹ has been added.

*¹ : Function is available only with a valid activated SpectraMagic™ NX2 dongle or dongle-less license.



Easily unify measurement conditions and environmental settings amongst spectrophotometers



Spectrophotometer Configuration Tool CM-CT1

- OS: Windows® 11 Pro
- CPU: Intel® Core i5 2.7 GHz or higher processor (recommended)
- Memory: 2 GB or more
- Hard disk: 10 GB or more of free space for installation
- Other: USB port (For connecting to spectrophotometers and SpectraMagic™ NX2 dongle)
- Windows® is a trademark or registered trademark of Microsoft Corporation™ in the USA and other countries.



The spectrophotometer CM-25cG can be used in a wide range of industries

Automotive



Plastic Parts and Products



Metal Surface Treatment



Paint & Coating



Leather / Textile



Plastics in Primary Form



The top 10 features



Simultaneous measurement of colour and gloss



Ideal for automotive plastics, road markings and high visibility clothing



45°c:0° geometry for excellent correlation to visual perception



High accuracy and repeatability on textured or structured surfaces



Integrated 60° gloss sensor



Firmware in 11 languages



Close Tolerance quality by default



Large and easy-to-read colour display

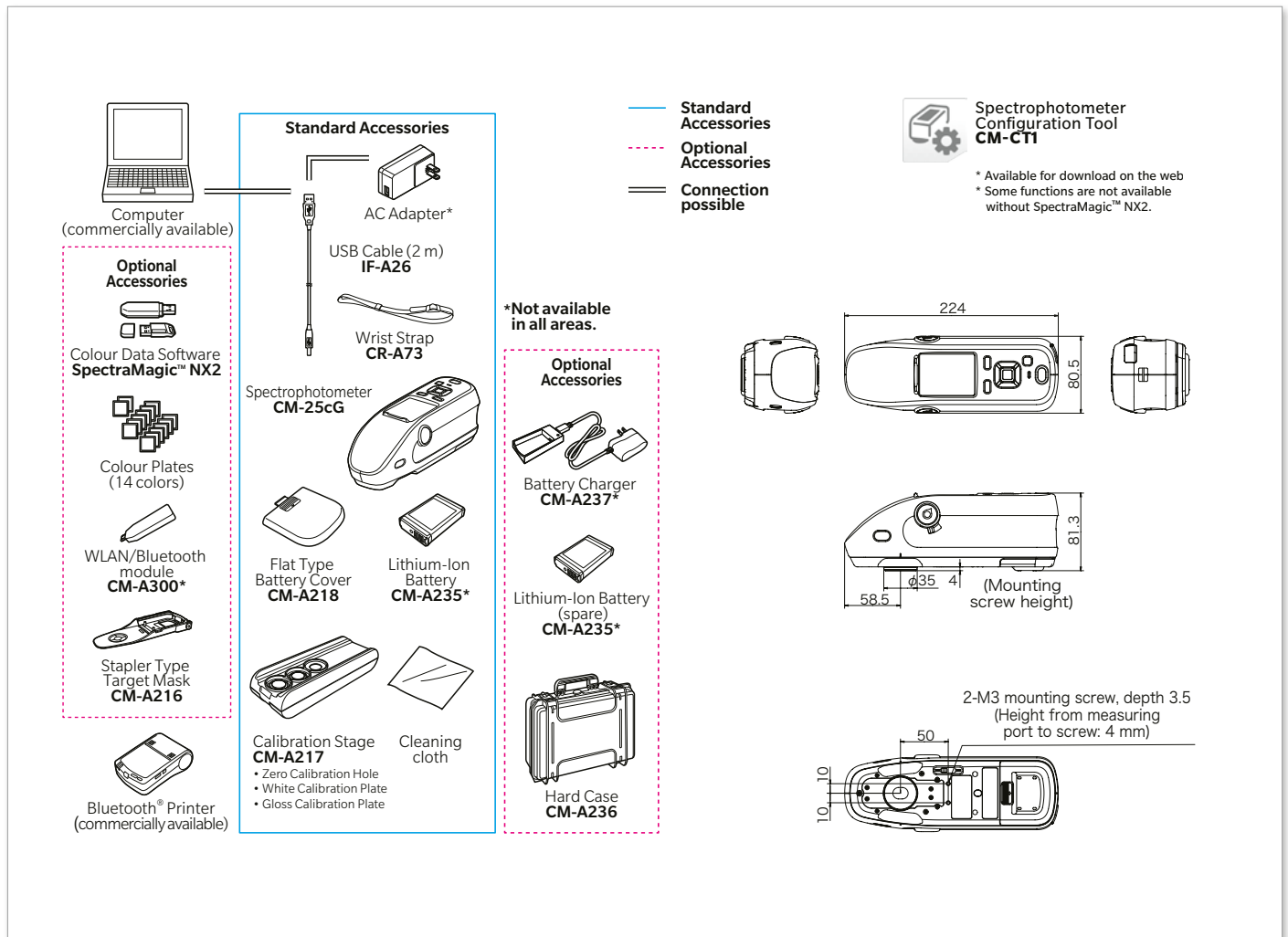


Designed to measure trim and interior materials



Compact and lightweight portable

System Diagram & Dimensions



Calibration Stage



Lithium-Ion Battery



Stapler Type Target Mask



USB Cable



Specifications CM-25cG

COLOUR	Illumination/viewing system	45°c:0°
	Applicable standards for illumination/viewing system	Conforms to CIE No.15 (2004), ISO7724/1, ASTM E179, ASTM E1164, DIN 5033 Teil7, JIS Z8722 Condition "a" standard
	Detector	Dual 40-element silicon photodiode arrays
	Spectral separation device	Planar diffraction grating
	Wavelength range	360 to 740 nm
	Wavelength pitch	10 nm
	Half bandwidth	Approx. 10 nm
	Measurement range	0 to 175 %; Resolution: 0.01 %
	Light source	Pulsed Xenon lamp
	Measurement/illumination area	MAV: Ø8 mm/12×16 mm, SAV: Ø3 mm/12×16 mm
	Repeatability	Standard deviation within ΔE*ab 0.04 (When a white calibration plate is measured 30 times at 10-second intervals after white calibration under Konica Minolta standard conditions)
	Inter-instrument agreement	Within ΔE*ab 0.15 (MAV) (Average for 12 BCRA Series II colour tiles compared to values measured with a master body under Konica Minolta standard conditions)
	Observer	2° Standard Observer, 10° Standard Observer
	Illuminant	A, C, D50, D65, F2, F6, F7, F8, F10, F11, F12, ID50, ID65, LED-B1, LED-B2, LED-B3, LED-B4, LED-B5, LED-BH1, LED-RGB1, LED-V1, LED-V2, User-defined illuminant** (Max. 3 types) (simultaneous evaluation with two illuminants possible)
	Display items	Spectral values/graph, colourimetric values/graph, colour-difference values/graph, pass/fail judgement, pseudocolour
	Colour spaces	L*a*b*, L*C*h, Hunter Lab, Yxy, XYZ, and colour differences in these spaces; Munsell
Indexes	MI, WI (ASTM E313-73), YI (ASTM E313-73, ASTM D1925), ISO Brightness (ISO2470), WI/Tint (CIE), User Index ² , Blackness(My) (ISO 18314-3/DIN55979); Jetness(Mc) (ISO 18314-3); Undertone(dM) (ISO 18314-3)	
Colour-difference equations	ΔE*ab (CIE 1976), ΔE*94 (CIE 1994), ΔE00 (CIEDE2000), CMC (l:c), ΔE (Hunter), ΔE99a (DIN 99a)	
Measurement geometry	60°	
Light source	White LED	
Detector	Silicon photo diode	
Colour sensitivity	Spectrally adjusted to CIE photopic luminous efficiency V(λ) under CIE illuminant C	
Measurement range	0 to 200 GU; Output/display resolution: 0.01 GU	
Measurement area	MAV: Ø10 mm, SAV: Ø3 mm	
Repeatability	Standard deviation 0 to 10 GU: Within 0.1 GU 10 to 100 GU: Within 0.2 GU 100 to 200 GU: Within 0.2% (When measured 30 times at 10-second intervals under Konica Minolta standard measurement conditions)	
Inter-instrument agreement	0 to 10 GU: Within ± 0.2 GU 10 to 100 GU: Within ± 0.5 GU (MAV; compared to values measured with a master body under Konica Minolta standard measurement conditions)	
Applicable standards	ISO 2813, ISO 7668(MAV), ASTM D523-08, ASTM D2457-13, DIN 67530, JIS Z8741 (MAV), JIS K5600	

GLOSS

Measurement time	Approx. 1 seconds (to data display/output)	
Minimum measurement interval	Approx. 2 seconds	
Battery performance	Approx. 3,000 measurements (approx. 1,000 measurements when using WLAN/Bluetooth) when measurements are taken at 10-second intervals at 23°C with the dedicated lithium battery	
Displayed languages	Japanese, English, German, French, Italian, Spanish, Chinese (Simplified), Portuguese, Russian, Turkish, Polish	
Display	2.7-inch TFT color LCD with reversible portrait viewing mode	
Interface	USB 2.0; WLAN (IEEE 802.11 b/g/n)/Bluetooth (Ver.4.1, SPP-compatible) ^{3,4}	
Data memory	Target data: 2,500 measurements; Sample data: 7,500 measurements	
Power	AC power supply	Dedicated AC adapter (with lithium-ion battery installed)
	Battery	Dedicated lithium-ion battery (removable)
	USB charging	USB bus power (with lithium-ion battery installed)
Charging time	Approx. 6 hours when no charge remains	
Operation temperature/humidity range	5 to 40 °C, relative humidity is 80% or less (at 35°C) with no condensation	
Storage temperature/humidity range	0 to 45 °C, relative humidity is 80% or less (at 35°C) with no condensation	
Size (W x H x D)	Approx. 81 x 81 x 224 mm	
Weight	Approx. 600 g (Lithium-ion battery included)	

*1 Optional Color Data Software SpectraMagic™ NX2 Pro (Ver.1.3 or later) is required for setting user-configured illuminants.

*2 Spectrophotometer Configuration Tool CM-CT1 Ver.1.5 or later and a valid Color Data Software SpectraMagic™ NX2 license are required for setting user indices.

*3 Requires optional accessory WLAN/Bluetooth module (CM-A300).

*4 WLAN security supports WPA2-PSK (WPA2-Personal) and WPA-PSK (WPA-Personal) for the AdHoc method, and WPA3-PSK (WPA3-Personal), WPA2-PSK (WPA2-Personal) and WPA-PSK (WPA-Personal) for the Infrastructure method.

- Bluetooth® is a registered trademark of Bluetooth SIG, Inc. and is used under license agreement.
- KONICA MINOLTA, the Konica Minolta logo and symbol mark, "Giving Shape to Ideas" and SpectraMagic™ are registered trademarks or trademarks of KONICA MINOLTA, INC.
- Displays shown are for illustration purposes only.
- The specifications and appearance shown herein are subject to change without notice.
- If you have any questions about specifications, please contact your Konica Minolta representative.

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.



Certificate No.: JQA-QMA15888
Registration Date: October 26, 2018
KONICA MINOLTA, Inc., Sakai Site
Product design, manufacture/manufacturing management, calibration and service



Certificate No.: JQA-E-80027
Registration Date: March 12, 1997
KONICA MINOLTA, Inc., Sakai Site



KONICA MINOLTA, INC
Konica Minolta Sensing Americas, Inc.

Osaka, Japan
New Jersey, U.S.A.

Konica Minolta Sensing Europe B.V.

European Headquarter
German Office
French Office
UK Office
Italian Office
Swiss Office
Polish Office
Belgium Office
Nordic Office
SE Sales Division
Beijing Office
Guangzhou Office
Chongqing Office
Qingdao Office
Wuhan Office

Nieuwegein, Netherlands
München, Germany
Roissy CDG, France
Warrington, United Kingdom
Cinisello Balsamo, Italy
Dietikon, Switzerland
Wroclaw, Poland
Zaventem, Belgium
Västra Frölunda, Sweden
Shanghai, China
Beijing, China
Guangzhou, China
Chongqing, China
Shandong, China
Hubei, China

Phone: +1-888-473-2656 (in USA)
Phone: +1-201-236-4300 (outside USA)

Phone: +31 (0) 30 248-1193
Phone: +49 (0) 89 4357 156 0
Phone: +33 (0) 1 80-11 10 70
Phone: +44 (0) 1925 467300
Phone: +39 02 84948800
Phone: +41 (0) 43 322-9800
Phone: +48 (0) 71 734 52-11
Phone: +32 (0) 2 71 70-933
Phone: +46 (0) 31 7099464
Phone: +86-(0) 21-5489 0202
Phone: +86-(0) 10-8522 1551
Phone: +86-(0) 20-3826 4220
Phone: +86-(0) 23-6773 4988
Phone: +86-(0) 532-8079 1871
Phone: +86-(0) 27-8544 9942

E-Mail: marketing.SUS@konicaminolta.com

E-Mail: info.sensing@seu.konicaminolta.eu
E-Mail: info.germany@seu.konicaminolta.eu
E-Mail: info.france@seu.konicaminolta.eu
E-Mail: info.uk@seu.konicaminolta.eu
E-Mail: info.italy@seu.konicaminolta.eu
E-Mail: info.switzerland@seu.konicaminolta.eu
E-Mail: info.poland@seu.konicaminolta.eu
E-Mail: info.belux@seu.konicaminolta.eu
E-Mail: info.nordic@seu.konicaminolta.eu
E-Mail: hcn_sensing@hcn.konicaminolta.cn
E-Mail: hcn_sensing@hcn.konicaminolta.cn
E-Mail: hcn_sensing@hcn.konicaminolta.cn
E-Mail: hcn_sensing@hcn.konicaminolta.cn
E-Mail: hcn_sensing@hcn.konicaminolta.cn
E-Mail: hcn_sensing@hcn.konicaminolta.cn

Konica Minolta Sensing Singapore Pte Ltd.
Konica Minolta Sensing, Inc.

Singapore
Optics Company, Sensing Business
Thailand Representative Office

Goyang-si, Korea
Bangkok, Thailand

Phone: +65 6563-5533
Phone: +82 (0) 2-523-9726
Phone: +66-2029-7000

E-Mail: ssg@konicaminolta.sg
E-Mail: se.korea@konicaminolta.com
E-Mail: sth@konicaminolta.com

Addresses and telephone numbers are subject to change without notice.
For the latest contact information, please refer to the KONICA MINOLTA Worldwide Offices web page: www.konicaminolta.com/instruments/network