



CODE	GT2359
MODEL	CM-23 D
EXTERNAL DIMENSION	81x93x229 mm
POWER	Li-ion battery + DC adapter
WEIGHT	620 gr

SPECTROPHOTOMETER CM23-D

STANDARDS

UNI EN ISO 10545-16

DESCRIPTION

The RM200QC Imaging Spectro Colorimeter is a portable instrument, practical to carry in your hand or pocket in any situation, in the quality control laboratory or in the production plant. More accurate and reliable than basic colorimeters, it eliminates the uncertainties arising from the use of colour samples in the final colour comparison. Specially designed for colour scientists, quality controllers and production managers.

TECHNICAL SPECIFICATIONS

- ILLUMINATION / VIEWING SYSTEM: D:8° (DIFfuse illumination, 8-degree viewing), equipped with simultaneous measurement of SCI (di:8° specular component included) / SCE (de:8° specular component excluded according to DIN5033-7, JIS Z 8722c, ISO7724 / 1, CIE No.15)
- Sphere Size: Ø 54 mm
- Detector: Dual 32 element silicon photodiode arrays
- Spectral separation device: Planar Diffraction Gratin
- Wavelength range: 400 nm to 700 nm
- Wavelength pitch: 10 nm
- Half bandwidth: approx. 10 nm
- Reflectance range: 0 to 175%, resolution: 0.01%
- Light source: pulsed Xenon lamp (with UV cut)
- Illumination area: Ø 12 mm
- Measurement area: Ø 8 mm
- Repeatability: Standard deviation within ΔE^* ab 0.08 (when a white calibration plate is measured 30 times at 5 second intervals after white calibration)
- Inter-instrument agreement: Within ΔE^* ab 0.4 (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)
- UV setting: 0% only; 400 nm UV cutoff filter
- Observer condition: CIE: 2° and 10° colorimetric standard observer
- Illuminant condition: CIE: A, C, D50, D65, F2, F6, F7, F8, F10, F11, F12, ID50, ID65
- Display items: Colorimetric value/graph, color difference values/graph, spectral graph, pass/fail judgment, pseudocolour
- Colorimetric values: L*^a*b*, L*^C*h, CMC (1:1), CMC (2:1), CIE94, CIE00, Yxy, XYZ and colour difference in these spaces; Munsell (C),
- Indices: MI, WI (ASTM E313-73), YI (ASTM D1925), Opacity

**TECHNICAL SPECIFICATIONS**

- Color difference equations: ΔE^{*ab} (CIE 1976) / $\Delta E94$ (CIE 1994) / $\Delta E00$ (CIE 2000) / CMC (l:c)
- Applicable standards: ISO 7724/1, CIE No.15, DIN 5033 Teil 7, JIS Z 8722 Condition "c"
- Measurement time: approx. 0,7 sec (mode SCI or SCE)
- Minimum measurement interval: ~ 1.5 seconds (SCI or SCE)
- Data memory: 1000 targets + 1700 samples
- Battery performance: measurement mode (SCI or SCE) approx. 3.000 measurement; approx. 1.000 when using Bluetooth™)
- Charging time: 6 h
- Viewfinder function: Available (with white LED illumination)
- Display: 2,7" TFT color LCD
- Display languages: English, German, French, Italian, Spanish, Portuguese, Russian
- Interface: USB 2.0; Bluetooth™ (SPP-compatible. Optional Bluetooth module required)

EQUIPMENTS

- Li-ion battery, AC adapter 230 v, USB cable, Calibration stage

ACCESSORIES AND SPARE PARTS

GT1340	Software lite USB
GT2360	Stapler type Target mask
GT2361	Colour plate tiles (14 colours)
GT2362	Colour plate tiles (14 colours)
GT2363	Bluetooth™ module USB
GT2364	Bluetooth™ external printer
GT2365	Battery charge
GT2366	Li-ion battery
GT2367	Hard case