



KONICA MINOLTA

# SPECTROPHOTOMETER CM-3220d

An Affordable Bench-Top Instrument  
with Top-Class Precision

Foolproof operation  
for POS applications

Built in calibration tile  
to prevent loss or damage

No compromise in precision  
and data compatibility

Xenon Flash illumination  
with simultaneous SCI / SCE  
measurement



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The **CM-3220d** is a very compact and rugged d/8 geometry instrument for POS applications with full data compatibility with all Konica Minolta CM-36xx and CM-2xxx models

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With only an ON/OFF switch and the built-in white calibration tile, the **CM-3220d** perfectly meets requirements for maximum ease of use as well as reliability and durability

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The essentials of imaging

## SMART FEATURES FOR POS APPLICATIONS

The compact CM-3220d Spectrophotometer represents an ideal bridge between the Konica Minolta family of the bench-top series CM-36xxd and the portable series CM-2xxxd. It uses the same exclusive technology such as simultaneous SCI + SCE measurement with powerful pulsed xenon lamps and a full wavelength range of 360-740 nm with 10 nm resolution. Thus, the CM-3220d provides close Inter-Instrument-Agreement levels and data compatibility with all other d/8 sphere type models.

The CM-3220d has been designed to meet the requirements of Point of Sale (POS) applications which usually have limited space, demand very easy operation and require the highest levels of reliability and durability.

All operations apart from the OM/OFF switch are fully controlled by the external software for maximum security. The large sample holder can be tilted 90 degrees allowing measurement of larger samples. The double flap enables perfect sample positioning and observation.

In order to prevent loss or damage of the white calibration tile, it is integrated in the instrument body and thus completely protected against dirt and scratches. The very rugged housing and the absence of any moving parts ensure highest levels of reliability. The CM-3220d can be interfaced with SpectraMagic NX software for QC and Colour-Matching using the same instrument driver as the portable model CM-2500d.



### Specifications:

<b>Illuminating /viewing system</b>	Diffuse: eight degree geometry; simultaneous measurement di:8° (specular included) and de:8° (specular excluded). Conforms to CIE 15.3, ISO 7024-1, DIN 5033-7, ASTM E1164 and JIS Z 8722.
<b>Sphere Size</b>	52 mm
<b>Wavelength Range</b>	360 - 740 nm
<b>Wavelength Pitch</b>	10 nm
<b>Reflectance Range</b>	0 - 175%
<b>Light Sources</b>	2 pulsed xenon lamps
<b>Measurement Time</b>	1.5 seconds (until data output)
<b>Minimum Measurement Interval</b>	3 seconds
<b>Measurement / Illumination Area</b>	8 mm / 11 mm
<b>Repeatability</b>	Spectral Reflectance within 0.1% Chromacitiy value: Standard Deviation dE*ab 0.04 Mean dE*ab 0.2 (Based on 12 BCRA Series II colour tiles)
<b>Inter Instrument Agreement</b>	
<b>Power Source</b>	AC Adapter (AC-A17)
<b>Dimensions / Weight</b>	232 (W) x 127 (H) x 232 (D), 4 kg
<b>Standard Accessories</b>	AC Adapter AC-A17, RS-232C cable IF-A16



\* This mark indicates ISO 9001:2000-certified quality management system.

### SAFETY PRECAUTIONS

To ensure correct use of the instrument, please adhere to the following.



- Before using the instrument, be sure to read the instruction manual.
- Always use the specified power. Use of inappropriate power may result in fire or electric shock.

[www.konicaminolta-isd.com](http://www.konicaminolta-isd.com)

Konica Minolta Photo Imaging Europe GmbH Europaallee 17, 30855 Langenhagen, Deutschland Tel. 0511 7404 895 Fax 0511 7404 807  
 Konica Minolta Photo Imaging France SAS ZI Paris Nord II, 305, rue de la Belle Etoile, 95948 Roissy CDG Cedex, France, Tél. 01 49 38 65 50 Fax 01 48 63 80 69  
 Konica Minolta Photo Imaging UK Ltd. Units 7-9 Tanners Drive Blakelands North Milton Keynes Buckinghamshire MK14 5BU, Tel. 01-908 283 930 Fax 01-908 618 662  
 Konica Minolta Business Technologies Italia SpA Via Stephenson 37, 20157 Milano, Italia, Tel. 02-39011-1 Fax 02-39011-219  
 Konica Minolta Photo Imaging Benelux B.V. Postbus 6000 3600 HA Maarssen, The Netherlands, Tel. 30-2470860 Fax 30-2470861  
 Konica Minolta Photo Imaging (Schweiz) AG Riedstrasse 6, 8953 Dietikon, Schweiz, Tel. 043 322 97 40 Fax 043 322 97 49  
 Konica Minolta Photo Imaging Svenska AB Solna strandväg 3, P.O. Box 9058, 17109 Solna, Sweden, Tel. 08-627 7650 Fax 08-627 7685  
 Konica Minolta Photo Imaging Austria Ges. m.b.H. Amalienstrasse 59-61, 1131 Wien, Österreich, Tel. 01-87882 222 Fax 01-87882 180  
 Konica Minolta Photo Imaging Polska spol. ZO. O. Ul. Nowolipie 7A, 146 Warszawa, Poland Tel. 22 56 03 161 Fax 22 56 03 664  
 Konica Minolta Photo Imaging U.S.A. 725 Darlington Ave. Mahawah, NJ 07430 Phone 201 529 6060 Fax 201 529 6070  
 Aquateknica S.A. Jordi de Sant Jordi, 8-acc, 46022 Valencia, España, Tél. 96 330 20 03 Fax 96 330 03 96

