



KONICA MINOLTA

Spectrodensitometer **FD-7 and FD-5**

State of the Art instruments for
measuring Colour, Density and Light

3 in 1

Colour

Density

Light



Giving Shape to Ideas

Ultra light Spectrodensitometer – the perfect instrument for conventional and digital printing and packaging applications

→ For the first time UV calibration in accordance with ISO 13655 M1

The new Konica Minolta FD Spectrodensitometers conform to measurement mode M1 of ISO 13655:2009. In addition to ISO measurement modes M0, M1, M2 and M3, the patented “Virtual Fluorescent Standard” (VFS) technology (UV calibration) allows the user to take measurements accurately for any light source.

→ Close correlation with visual evaluation

The impact of fluorescent whitening agents in papers on the final print depends on the amount of UV in the viewing environment. Until now Instruments were unable to take UV content into account.

Using Konica Minolta’s VFS technology, the actual amount of UV in the viewing environment can be used for measurements. The result is a close correlation between visual evaluation and measurement when assessing the impact of whitening agents.



→ New perspectives in colour matching

Take advantage of the experience of the world leader in light measurement. The FD-7 is perfectly suited for measuring light sources. Illuminance, colour temperature and Δuv are shown on the instrument display.

For the first time visual evaluation and colour measurement are closely correlated by using the colorimetric values of the light source for measuring reflectance.



We take all possible steps to ensure the accuracy of your instrument

With conventional Instruments it is necessary to regularly correct for a wavelength shift. In the past, this could only be corrected by the manufacturer. The FD-5 and FD-7 perform an evaluation of wavelength accuracy and if necessary a shift compensation with every white calibration.

As the instrument also corrects for temperature drifts one can be assured of precise and stable measurements between annual preventive maintenance checks – Testimony to Konica Minolta's superior technology and commitment to innovation.

3 in 1

Colour

Density

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A versatile solution for the printing industry

→ Standalone – Scanning – Light measurement

In addition to its use as a lightweight stand alone instrument, when connected to a PC, the FD-7 can be used for scanning test charts.

In scan mode one measurement shows the impact of fluorescent whitening agents for several viewing conditions. This is a unique feature. The light measurement allows the user to compensate for the viewing conditions in the light cabinet, at the Point of Sale or at a trade fair to ensure perfect colour reproduction.

Lightest of its class

The main body with the target mask attached weights just 430g, lighter than any comparable instrument currently available. Assuring easy and fatigue free measurement sequences.

Achieving standards with ease

Challenges are solved by expertise

→ World first: Conversion of measurement backings

The Konica Minolta FD-series Spectrodensitometers solve the challenge of colour control on a black backing against standards that were established for a white backing. The built-in backing compensation function is a world first in a spectrodensitometer.

→ Quality – not compromises

TARGETMATCH displays the optimal print density to achieve stored colour standards. With ISOCHECK these standards can be controlled according to colour value and tone value increase without the need for additional software. The colorimetric gray balance check completes the objective quality control functionality.

TARGETMATCH	M1 2° D50	
<input checked="" type="checkbox"/> Paper	ΔK	+0.120D
<input checked="" type="checkbox"/> Black	ΔE^*ab	3.75@ 1.460D
<input checked="" type="checkbox"/> Cyan	>> 2.02@ 1.580D	
<input type="checkbox"/> Magenta		
2/ 9	CS01:PT1-AM-BB	
Measured Black		

→ Compatible

The Spectrodensitometers FD-5 and FD-7 share the same hardware meaning improved consistency in prepress, ink colour matching and pressroom. The Konica Minolta calibration standards and traceability assure state-of-the-art compatibility with the standards of the printing industry.

→ For every challenge

Colour standards according to ISO 12647 or brand colours can be saved as color sets and uploaded to the instruments using the FD-s1w Data management software. Uploaded standards can be used by ISOCHECK for quality control and process adjustment by TARGETMATCH at any time.



Automation for the routine and the extraordinary

The ColorScoutA+ is an automated precision xy-stage with a 320*460mm scan area to enable automated measurements of characterisation charts with a large number of colour patches. The FD chartmaker is included free of charge to enable users to easily create complex test chart layouts.

Using the xy-stage and the FD-7 users can make significant time savings when scanning large test charts.

Solutions built around your needs



→ Intelligent solutions for speciality printing

Using CSA+ and the basicColor catch Software Suite enables highly automated measurements of charts even if they have to be distributed over several prints (e.g. labels, credit cards).

→ Automation for LFP printers

Digital large format printers can use several substrates which are challenging or impossible to be measured for conventional printing industry equipment (e.g. aluminium, ceramics, wood, textiles, vinyl). By automating the Konica Minolta CM-2600d (sphere spectrophotometer) the ColorScoutA+ offers a solution in combination with ICC Profiling Packages for the first time. This enables objective calibration for materials with structured or metallic surfaces.

Model	ColorScoutA+
Measurement range (maximum chart size)	320 x 460 mm
Measuring instrument	Spectrodensitometer FD-7 / FD-5 & Spectrophotometer CM-2600d
Minimum chart patch size	6 x 6 mm
Maximum sample thickness	FD-7: Standard 1.5 mm (others on request) CM-2600d : 30 mm
Operating temperature/ humidity range	10 to 35°C, relative humidity 30 to 85% with no condensation
Storage temperature/ humidity range	-20 to 60°C, relative humidity 0 to 90% with no condensation
Standard accessories	Mounting bracket for FD-7, Height adjustment plate, ColorChart software, RS-232C cable, USB to RS-232C serial converter, USB cable AC power cord, White calibration plate for ColorScoutA3+, basicColor Catch
ColorChart minimum computing requirements	OS; CPU Windows.XP(32-bit), Windows. Vista (32-bit); 300MHz or faster Hard disk; Memory 30MB or more available disk space; 64MB or more Display 1024 x 800 pixels or more

