

# TECHKON®



## Spectrophotometer SP 820 $\lambda$ / SP 830 $\lambda$

- highest and long-lasting precision through monolithic grating-diode-array
- high measurement speed
- patented measuring head for pinpoint-positioning on sample
- exceptionally easy handling, compact size
- menu-driven, self-explanatory operation
- high-resolution graphic LCD display for listing of all relevant color data and remission curves
- connectivity to several software applications
- SP 830  $\lambda$  with insertable polarisation filter and densitometer functions

The TECHKON spectrophotometers SP 820  $\lambda$  and SP 830  $\lambda$  are the key to professional treatment of colors. The compact color measuring devices meet the highest demands in terms of precision and reliability. The device's performance characteristics ensure universal application in all settings where colors must submit to critical judgement.

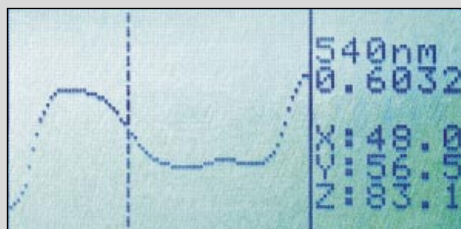
The measuring module consists of a fixed grating-diode-unit with high spectral resolution. Due to the fixed positioning of the optical components the device has no moving parts and is thus extremely



robust and maintenance-free.

The compact measuring head is positioned directly above the object to be analyzed and thus permits the measurement of even small color samples.

Four function keys and the self-explanatory menu in the graphic LCD display make using as easy as child's play. Several display languages can be selected.



The SP 820  $\lambda$  and SP 830  $\lambda$  feature all common colorimetric functions, including the display of remission curves and their values. These functions make the instrument especially useful in mixing and matching colors.

Additionally the SP 830  $\lambda$  offers an insertable polarization filter and densitometer functions. Prints with more than four inks can be measured very precisely thanks to the possibility of free filter selection. In the graphic arts industry the SP 820  $\lambda$  and SP 830  $\lambda$  are used for analyzing images and later comparison with print proofs. Quality parameters during all stages of prepress and final print are securely controlled. The easy handling and the high measurement speed permit fast and reliable measurement of the numerous fields on testcharts as used in Color Management Systems.

Via the bidirectional interface measurement data can be transmitted to a computer and, vice versa, entire color libraries from application programs into the device. TECHKON offers a range of software solutions for a variety of applications.

## Technical Data

Measurement	spectral remission measurement according to DIN 5033 and DIN 6174	Internal memory	500 samples
Measuring functions	XYZ	Repeatability	$\Delta E^*ab < 0.03$ (on a white ceramic)
	$L^*a^*b^*$	Light source	gas-filled tungsten
	$L^*u^*v^*$	Measuring module	monolithic Zeiss grating-diode-array
	$\Delta E^*ab$	Measuring geometry	0° illumination
	$\Delta E^*94$		45° detection
	Remission		Measuring area
Metamerism		Display	graphic LCD-Display
Whiteness Index CIE and Berger		Data interface	serial RS 232
Yellowness Index G 1925			bi-directional
SP 830 $\lambda$ with insertable polarisation filter and densitometer functions		Power supply	rechargeable NiMH-batteries
AC charger			230V/50Hz or 110V/60Hz
Controlled charging with capacity display		Measurements	approx. 10.000 per charge
Illumination types	D65 / D50 / C / A	Dimensions	HWL: 56 x 64 x 186 mm
Observer	2° / 10°	Weight	640 g
Spectral range	380 to 780 nm in 10 nm steps		
Measuring time	less than 1.5 sec.		

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