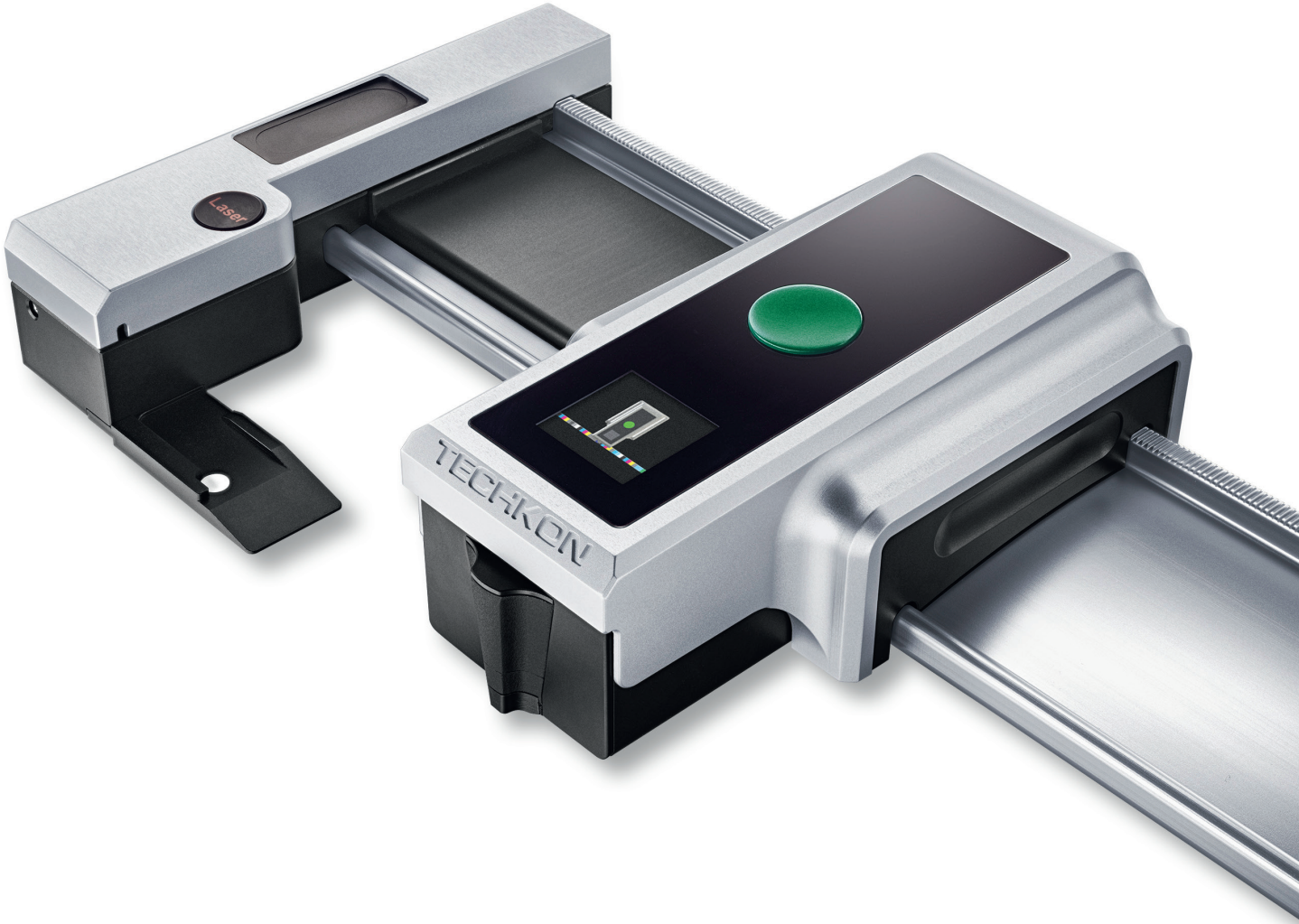


TECHKON

Perfect Color Made Easy



TECHKON SpectroDrive



TECHKON SpectroDrive – Scan-Measurement System

Quality on the fast track

High quality and productivity

The latest generation of the proven TECHKON SpectroDrive provides important advantages: Precise measurement, outstanding reliability, and fast measurement. The automated scanner fully integrates into your printing process. The result: a boost in productivity and quality during your press runs.

The motorized measurement head scans the entire color bar on a printed sheet within seconds and simultaneously sends the spectral measurement data wirelessly to the software. All relevant information for controlling your printing press is clearly displayed by the TECHKON ExPresso 4 software. The SpectroDrive is also compatible with other types of software commonly used in the industry.

Increase profitability

Due to the growing popularity of smaller print jobs and shorter press runs, the time spent between starting the press and getting “up to color” for consistent quality is critical. TECHKON SpectroDrive reduces this non-productive time drastically. You will increase profitability by reducing paper and ink waste and saving valuable on-press time. The SpectroDrive scanning system makes your print jobs more data-driven and results more predictable. As a result, customers will appreciate the color accuracy and the

consistency in quality. Utilizing TECHKON SpectroDrive metrics, ISO-compliant printing is easier than ever before.

The time and materials saved by introducing the SpectroDrive leads to immediate return on investment. Modernize your press by utilizing the best in color quality control in the industry. Please your customers and benefit from the efficiencies of data-driven.

Ease of use and high speed measurement

Managing a press from beginning to end of a print run can be compared to piloting a commercial jet. It is a detailed process that requires many time-critical decisions. The press operator – much like a pilot – must perform many tasks and make many time-sensitive decisions throughout the run. Using the TECHKON SpectroDrive is exceptionally intuitive, making operation fast, precise, and effective.

The SpectroDrive has a variety of features designed for convenience, including: 1) A laser sight that can be activated to support the exact positioning of the print control strip, 2) A single button to start the measurement process, and 3) Simple installation ensuring the device is set-up and operable in a matter of minutes, and 4) Solid aluminum uni-body construction ensuring exceptional durability and reliability, and 5) Fast and convenient inductive charging.



Two measurement systems in one

Measurements result in accurate densitometric and colorimetric values for every scan. The SpectroDrive scanning head can also be used as a hand-held instrument for single measurements. Simply remove the device from the horizontal track and position it over the patch or in-image target you'd like to measure. SpectroDrive features an integrated display window that shows the measurement values of spot measurements directly on the device.

ExPresso Software

The TECHKON ExPresso 4 software has a user-friendly user interface and is fully touch-screen capable. The ExPresso software offers a comprehensive tool set facilitating measurement of spot

colors, support up to 16 print units, front-side and reverse printing, display of color density, dot gain, gray balance, CIE L*a*b*-values, and recommendations for on-press ink key adjustments.

Thanks to its modularity, TECHKON ExPresso 4 is expandable and versatile. Measurement data can be exported into other software applications that connect realtime to printing presses, enabling "closed loop" ink key adjustment. In addition, ExPresso software can export measured data to standard applications such as Microsoft Excel™.



Versions and functions

The SpectroDrive scanning and measurement device and the Windows-based ExPresso 4 software combine to form a complete quality control system for increasing productivity and quality of a printing press. There are two different packages available; ExPresso Basic and ExPresso Pro. A software upgrade from SpectroDrive Basic to the Pro version is available.

SpectroDrive + ExPresso 4 Basic Software

Consists of the SpectroDrive spectral-measurement device and Windows-based TECHKON ExPresso 4 Basic software with the following functions:

- Density CMYK (with reference measurements) ▪ Dot area ▪ Dot gain ▪ Print contrast ▪ Gray and color balance ▪ Ink trapping ▪ Printing curve
- Density spectrum ▪ Spectral density for spot colors ▪ Trend function ExPresso mini ▪ Slur/doubling ▪ Dot area to Yule-Nielsen for printing plates

SpectroDrive + ExPresso 4 Pro Software

Same functions as the Basic package and additionally: ▪ Ink zone specific colorimetric CIE L*a*b* and $\Delta E^*a^*b^*$ display ▪ $\Delta L^*a^*b^*$ ▪ CIE L*C*h* ▪ $\Delta L^*C^*h^*$ ▪ InkCheck: recommendation for ink key setting ▪ Display and evaluation according to ISO 12647 (PSO) ▪ GrayGuide (gray balance) according to Gracol G7™ ▪ OBA-Check ▪ Supports up to 16 printing units

Software ▪ TECHKON ExPresso 4; delivered on CD with software protection key (USB dongle) and CD with print control strip TCS Digital System requirements: Windows 7, 8 or 10; 32- and 64-bit, minimum: IBM-compatible PC with Intel Core Duo processor or comparable processor, 4 GB RAM, 2 USB ports; screen resolution for TECHKON ExPresso: minimum 1280 x 1024 pixel

Contents ▪ Measurement device SpectroDrive ▪ Charging console with integrated white standard ▪ AC adapter with universal plugs ▪ Horizontal track with holder ▪ 2 vertical bars ▪ WLAN module for wireless data transmission ▪ USB cable ▪ Manual with ISO 9000 compliant certificate (pdf on data media) ▪ Manufacturer certificate ▪ Screwdriver ▪ 4 screws ▪ Optional: data media with software ExPresso 4, USB dongle Optional accessories ▪ Color reference TECHKON SpectroCheck

Specifications

Measurement geometry	0° : 45° optics according to ISO 5-4
Spectral range	400 to 700 nm in 10 nm steps
Measurement aperture	1.5 mm, appropriate for measuring patches with at least 3 x 3 mm (h x w)
Light source	LED, provides measurement conditions M0, M1, M2, M3 according to ISO 13655
Polarization filter	Twice linear crossed, switched on and off per software command
Measurement time	Approx. 160 mm/s for 4 mm patches (equals approx. 3 seconds for 520 mm sheet length), single measurement approx. 1 second (if SpectroDrive is used as hand-held device)
White reference	Absolute and relative; absolute white standard integrated in charging console
Illumination types	A, C, D50, D65, F 2/7/11
Standard observer	2°, 10°
Density filter	ISO/ANSI T, ISO/ANSI I, ISO E; spectral density Dmax

Density measurement range	0.00 – 2.50 D
Formats	52 (20") for sheet format 00 (B3+, 370 x 520 mm); 74 (28") for sheet format 0B (B2+, 520 x 740 mm); 102 (40") for sheet format 3B (B1+, 720 x 1020 mm); 105 (42") for sheet format 3B+ (B1+, 780 x 1050 mm); special formats (up to 2060 mm) on request
Repeatability	0.01 D; 0.03 CIE $\Delta E^*a^*b^*$
Inter-instrument agreement	0.01 D; 0.3 CIE $\Delta E^*a^*b^*$
Display single measurement	Color-OLED, 128 x 128 pixel
Data transmission	WLAN module for wireless data transmission with PC-sided USB connection
Power supply	LiFePO4 battery, regulated recharge via charging console with AC adapter, 100 – 240 V, 47 – 63 Hz
Weight	Measurement device: 925 grams
Dimensions	Measurement device: 59 x 96 x 170 mm (approx. 2.3 x 3.8 x 6.7 inches)

System requirements for TECHKON software: Windows 7, 8 or 10; 32- and 64-bit, minimum: IBM-compatible PC with Intel Core Duo processor or comparable processor, 4 GB RAM, 2 USB ports; Screen resolution for TECHKON ExPresso 4: minimum 1280 x 1024 pixel