

TECHKON



**We measure color
and more**

**Precise . Effective . Reliable
Technology Made in Germany**

TECHKON SpectroEdge ES5000 Embedded In-Line Spectrophotometer

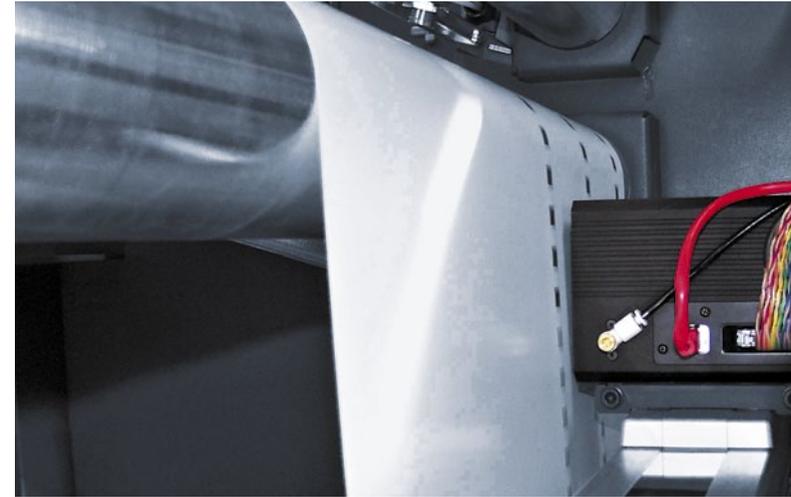
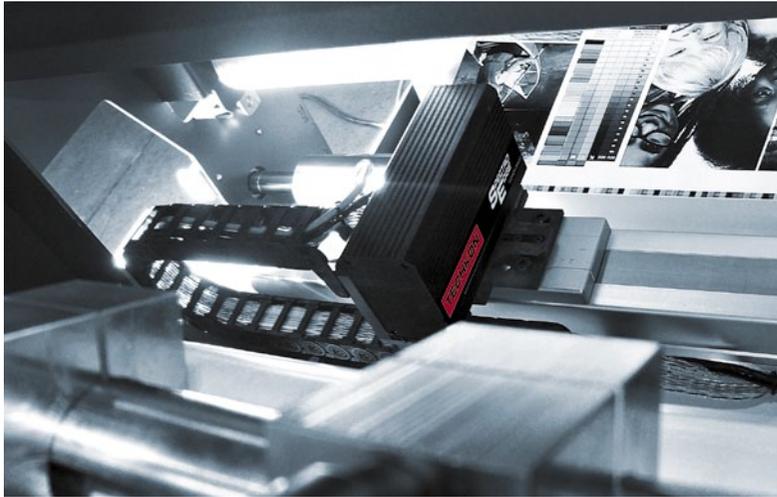


SpectroEdge ES5000 is based on the same leading-edge color measurement technology that TECHKON is known for globally. The ES5000 runs on an embedded version of a Linux operating system, and is capable of monitoring up to 4 high-speed control signals providing communications with the host computer for greater production automation and efficiency.

SpectroEdge is set up to read 4 x 6 mm color samples either at preset intervals or frequencies, or via a hard-wired signal initiated by the printing press controller. The ES5000 software converts the raw data, instantly interpreting the color values sent to the host computer to make automatic “on-the-fly” press adjustments, both quickly and efficiency.

Key benefits of the TECHKON ES5000 include:

- Exacting color, delivering offset color quality from a digital press
- Precise automation of the closed loop color calibration process, eliminating both errors associated with manual checks and interrupted press runs
- “On-the-fly” setup and inking adjustments, providing shorter make-ready, less paper and ink waste. Exacting color control of the press – all without a single sheet pull
- Keeps pace with digital presses running 300 m/min. or 1.000 ft/min. (4 x 10 mm), working reliably at variable speeds
- No media contact, operating 3 mm away from the media, eliminating smudging and scratching the ink on the media
- Color quality control with every impression, monitoring color in real-time with no need to stop press
- Embedded Linux computer operating system, enabling future development and expansion



Our philosophy for perfect measurement devices

As all TECHKON products, the innovative Spectro product series was designed applying our four powerful principles for perfect measurement devices:

Easy and fast to use

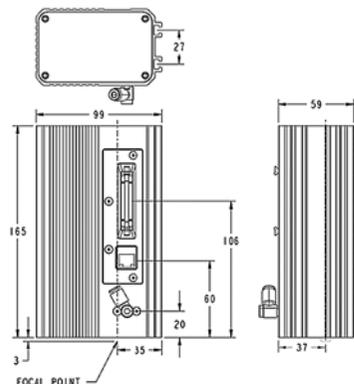
High measurement accuracy

Solid and reliable

Functional and attractive design

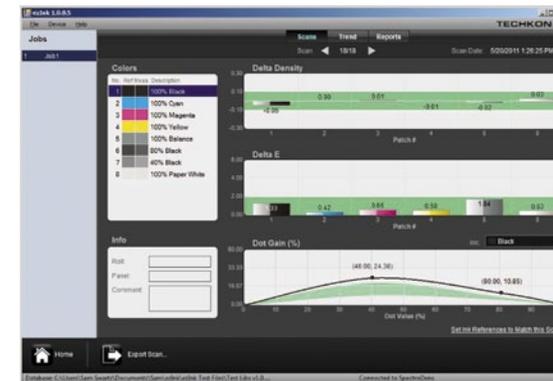
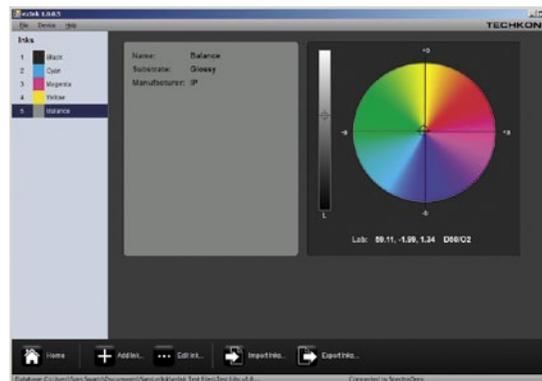
The key technological advantages at a glance

- PRECISE**
- Fast, highly accurate 3.000 samples-per-second scanning spectrophotometer, reporting 31 spectral bands. Each color patch is measured multiple times to reduce error in the color variation within the color patch
 - Onboard Linux operating system capable of automatically identifying color patches using image recognition algorithms
 - Operates at 3 mm height, accommodating ± 5 mm change in distance from media
-
- FAST**
- Delivers 3.000 spectral samples/second to judge uniformity across the entire media width
 - Simultaneous measurement of CIE L*a*b, CIE L*C*h* and status T & E densities
-
- SOLID**
- Tough, all-metal construction withstanding vibration, even the impact of broken media
 - Thermally rugged, can be placed in close proximity to the IR dryers
-
- VERSATILE**
- Used as a diagnostic tool to measure the color density variation across the media, in case the nozzles get clogged or the printer is not printing uniformly



Mechanical specifications
 Product dimensions of the
 TECHKON SpectroEdge:
 165 x 99 x 59 mm

The ezlink software
 Text



Specifications

Measurement technology	Spectral remission and color density to ISO 5-3/4
Measurement geometry	45/0 optics to DIN 5033
Spectral range	31 reported bands from 400 nm to 700 nm
Measurement aperture	3 mm x 3 mm
Color patch size	4 x 6 mm with the standard aperture size (Custom apertures available on request)
Distance from media	3 mm
Accommodation of media thickness	± 0.5 mm
Light source	Gas-filled lamp, type A illumination
Polarization filter	(On request)
Scan parameter	Scanning speed 5.000 mm/sec (4 x 10 mm color patches)
Density standards	DIN 16536, ISO/ANSI T, ISO/ANSI I, Dmax
Density range / Repeatability	0.0 – 2.5 D / ± 0.015 D
Communication port	Ethernet

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