

PROJECTINA

SPECTRA+
PRO

THE ULTIMATE DOCUMENT EXAMINATION AND SCANNING SYSTEM



projectina®



STATE-OF-THE-ART SPECTRAL ANALYSIS FOR FORENSIC LABORATORIES, SECURITY PRINTERS AND IMMIGRATION AUTHORITIES

In the world of document examination, the ability to see the smallest of details is paramount.

SUPERIOR OPTICAL IMAGE QUALITY

A CRYSTAL CLEAR IMAGE FROM EDGE TO EDGE



IMAGE MERGING
UP TO 16 IMAGES CAN BE COMBINED

LIGHTNING
IMAGE CAN BE BRIGHTENED WITHOUT GENERATING MORE REFLECTIONS AND WITHOUT CAMERA SETTINGS



AUTO MATCHING
FULLY AUTOMATIC ALIGNING OF TWO IMAGES



MAGNIFICATION
UP TO 500x

SPECTRA PRO+ CAN BE EQUIPPED WITH A **WIDE RANGE OF ACCESSORIES AND MODULES**



AUTOMATED EXPOSURE ADJUSTMENTS

AUTOMATED LIVE IPI / ICI AND LATENT IMAGE DETECTION



AUTOMATED MRZ READOUT
WITHOUT HAVING TO PLACE A READING FRAME



FULL AUTOMATION FOR RECURRING EXAMINATIONS
WITH EASY CHECK AND EASY SCAN



IRIDESCENT INK VIEWER
MADE VISIBLE WITH POLARIZATION FILTERS



SPECTRAL AUTOFOCUSING
WITH CALCULATED FOCUS POINTS FOR FASTER WORKFLOW



AUTOMATED FACE RECOGNITION AND MATCHING



SPECTRA PRO+ THE ULTIMATE DOCUMENT EXAMINATION SYSTEM

In the world of document examination, the ability to see the smallest of details is paramount.

With **superior optics**, **exceptional imaging** and **advanced technology**, Projectina **Spectra Pro+** is the definitive solution for examining even the subtlest forms of tampering or most sophisticated counterfeits.

Spectra Pro+ incorporates class-leading optical technology to provide unprecedented image quality and enhanced viewing options. Some further outstanding features are:

- Dynamic true magnification display
- Fully automated A4 / Letter stitching in one process and with high resolution



EXCEPTIONAL IMAGING

VIEW REMARKABLY SHARP IMAGES AT ALL WAVELENGTHS

Spectra Pro+ state-of-the-art digital camera provides clear, high resolution imaging throughout the full spectral range. The camera's extreme sensitivity in wavelengths between 350 and 1100 nm means infrared images are crisper and regions of interest are easier to examine.

EXAMINE MICROTTEXT EASILY

Spectra Pro+ industry-leading optical magnification of up to 500x on a 32" 4K monitor (with 24.5 MP camera) enhances the ability to inspect microtext, fibers and other microscopic security features.

SEE MORE, SAVE TIME

A wider field of view makes it easier to view multiple or larger regions of interest, and also means less time spent repositioning documents.

ENJOY A BETTER USER EXPERIENCE

A fast USB 3 connection combined with the latest software means zero lag and instantaneous image refresh when adjusting lighting or document positioning.



IR IMAGING



HIGH MAGNIFICATION IMAGES

EFFICIENT WORKFLOW

Forensic document examination is precise, meticulous work. **Spectra Pro+** has been expressly designed to facilitate ease-of-use and increase productivity while maintaining the most exacting quality standards.

The end result? A better user experience that lets you focus where it matters most.

INCREASE PRODUCTIVITY

The Spectra Pro+ can be programmed to create any number of inspection sequences redefined processes can be automated, an incredible time-saver for routine or bulk examination.

STREAMLINE EXAMINATION

Spectra Pro+ newly designed, motorized X/Y Translation Stage, which also boasts a greater range of movement, makes it easier and faster to inspect multiple regions of interest. With its automated remote control, users will also spend less time manually repositioning documents and more time examining.

REFOCUS FASTER

A unique Spectral Focusing feature allows Spectra Pro+ to automatically refocus with greater speed and precision when changes are made to lighting and magnification.



FULL-SPECTRUM LIGHTING

Spectra Pro+ multiple light sources, including cool-running LEDs and extensive number of emission filters, give examiners the ability to create the precise lighting conditions needed to examine any security feature - no matter how advanced.

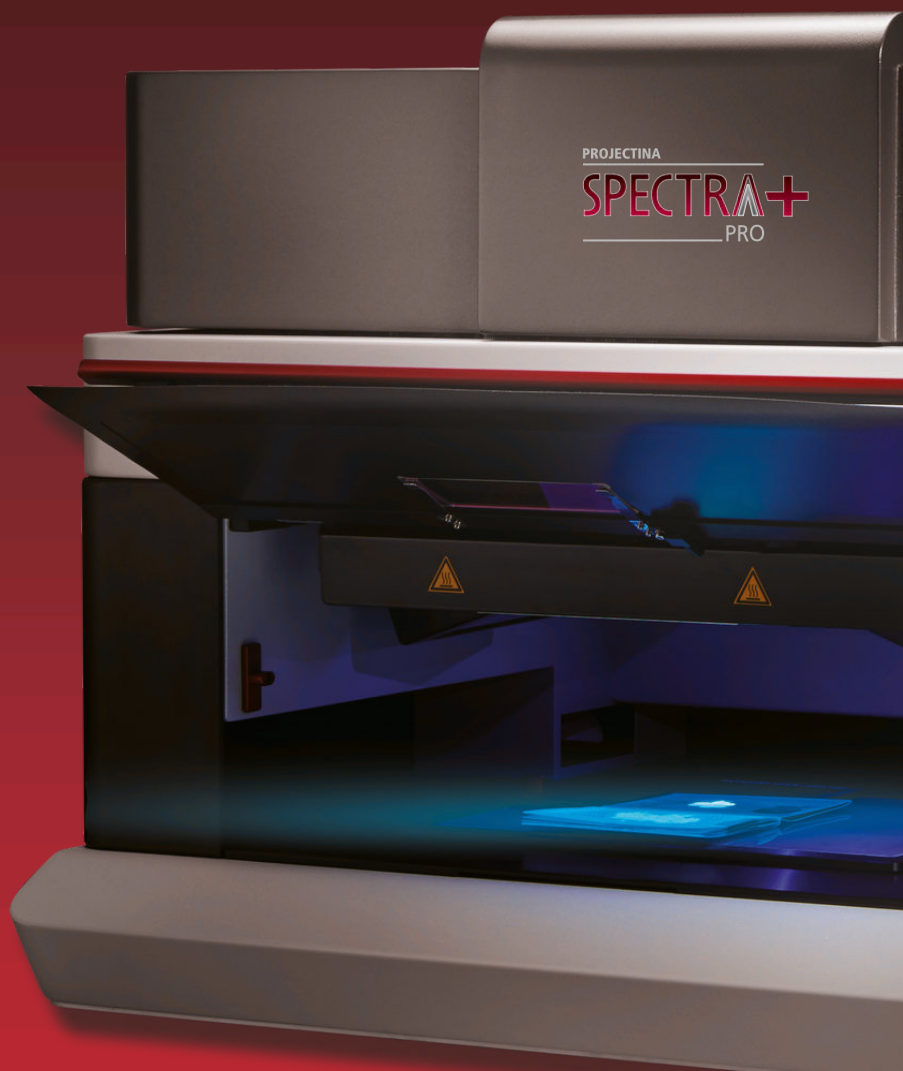
- UV activated security features
- OVDs, holograms and kinegrams
- IR illumination "Anti-Stokes"
- Retro-reflective features
- OVI Optical Variable Ink
- Phosphorescent inks
- Watermarks
- Laser images and engravings
- Latent images
- Birefringent features like e.g. SICPA OASIS®
- Stamps and embossing
- Fibers and other paper security features



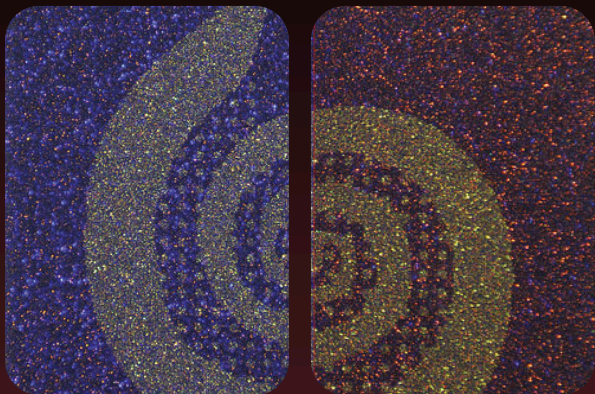
TRANSMITTED LIGHTING



MICROTEXT UNDER
HIGH MAGNIFICATION



IN-DEPTH INSPECTION



POLARIZED FEATURES



HOLOGRAM WITH LED RINGLIGHT



ANTI-STOKES SECURITY FEATURES



IR LUMINESCENCE



UV INK AND FIBERS



PHOSPHORESCENCE

VERSATILE VIEWING - RAPID RESULTS

Spectra Pro+ provides examiners with the full range of features needed for the comprehensive inspection, authentication, and quality assurance of passports, ID cards, security and legal documents, banknotes and cheques.

FORENSIC LABORATORIES

Spectra Pro+ high-precision Spectroscopy and Hyper Spectral Imaging modules help examiners to easily detect and record alterations, forgeries and counterfeit documents.

HYPER SPECTRAL IMAGING

Distinguish inks and highlight spectral differences across a userdefined spectrum with a continuous 400 – 1000 nm bandpass filter and imaging system.

SPECTROSCOPY

Identify minute differences in inks and papers using spectral analysis that can assess precisely to 2.4 nm resolution, within a range of 360 – 1100 nm.

SECURITY PRINTERS

With a complete software suite and user-friendly modular design, Spectra Pro+ is ideal for measuring and verifying the multiple demanding quality standards applied to banknotes, passports, visas and other legal documents.

IMPLEMENT EFFICIENT, HIGH-PRECISION QUALITY CONTROL

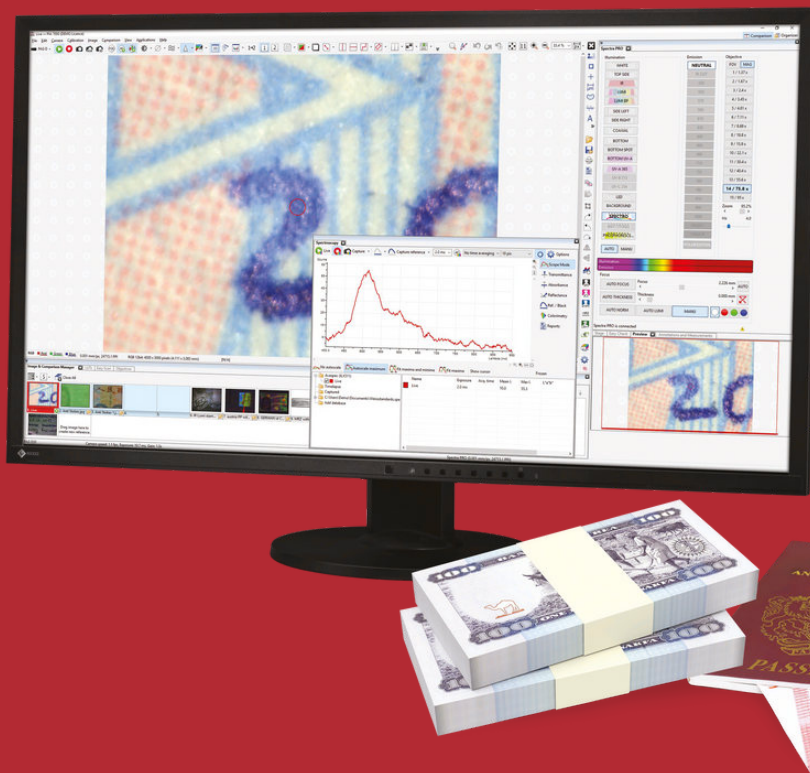
Now with a greater range of motion, the X/Y Translation Stage allows users to create large, high-resolution images and automate examination sequences, saving enormous time and effort.

ACCESS WITH EASE

Thanks to Spectra Pro+ easily removable side panels, there is no need to cut or alter large currency sheets or other oversized materials in order to view regions of interest.

SEE MICRO-FEATURES CLEARLY

Optical magnification up to 500x (on 32" 4K monitor with 24.5 MP camera) allows for easy inspection of microtext and other microscopic security features.





IMMIGRATION AUTHORITIES

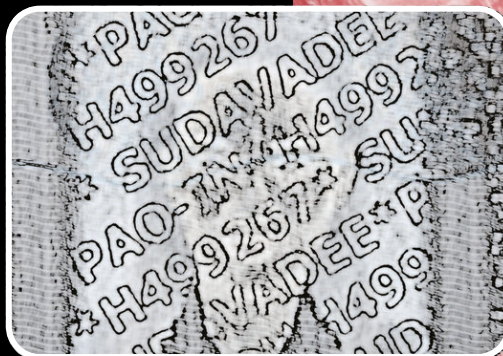
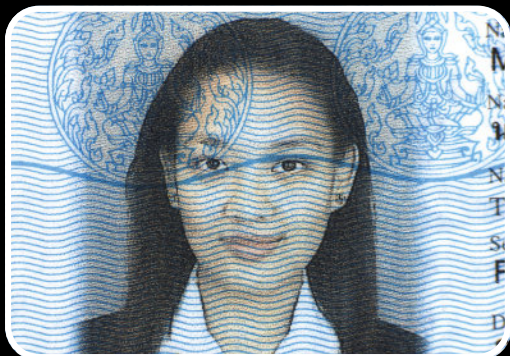
Spectra Pro+ provides immigration authorities and third line border control with all the features needed to thoroughly examine and authenticate travel documents.

REVEAL INVISIBLE INFORMATION

Spectra Pro+ comes equipped with specially designed software modules, to decode proprietary security features such as IPI (Invisible Personal Information), LetterScreen++® and ICI (Invisible Corporate Information), encoded on passports and ID cards.

ADD-ONS

The PAGScan 3000 passport scanner with 700 dpi resolution employs RFID and smart card reader for scanning passports, visas, IDs, and drivers licenses, and a software module that decodes MRZ (Machine Readable Zone) information and barcodes.



IPI - INVISIBLE PERSONAL INFORMATION



OPTIONAL MODULES AND ACCESSORIES

EXAMINATION ACCESSORIES



OVI MIRROR

View colour shifts in
Optically Variable Inks



EDGE SEAL MIRROR

View laser engraving on
sealed edges of ID cards



TILT PLATE

View and record OVDs,
holograms and Kinegrams



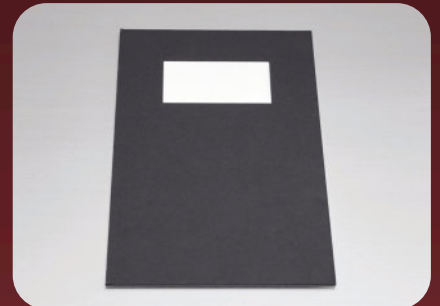
PASSPORT READER PAGSCAN 3000

Scan MRZ, barcodes, read
RFID's and smartcards



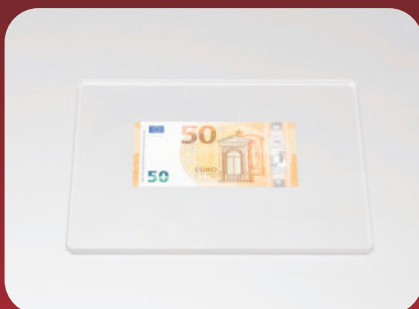
MAGNETIC INK PROFILER

Visualize magnetic inks



CARD HOLDER

Hold standard size ID
cards for UV examinations



QUARTZ GLASS PLATE

Flatten documents and
prevent movement during
examination
250 mm x 200 mm x 6 mm

MICROSCOPE OPTION

PAG 1000 STEREOMICROSCOPE

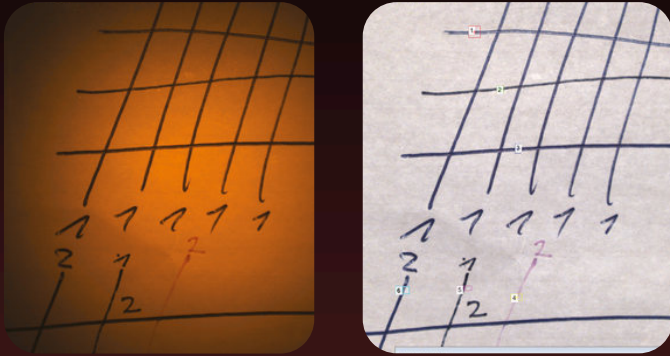
Versatile stereomicroscope with 8x
optical zoom for total magnification
of up to 60x and optional high-
resolution digital camera.

Ergonomic binocular tilts from 0 to
30 degrees for examiner comfort.
Includes two spotlights and ringlight
with 4 selectable segments.
Additional options available.



SOFTWARE MODULES

HYPER SPECTRAL IMAGING



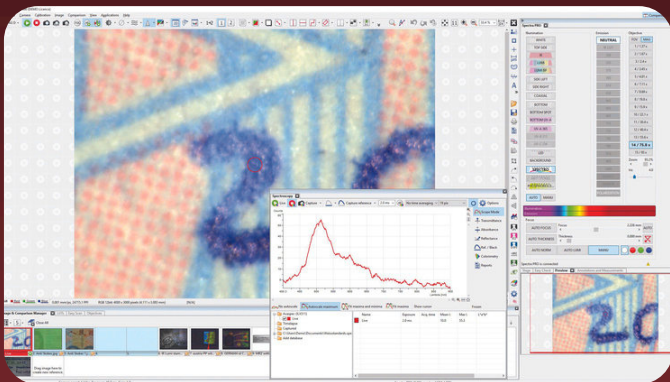
Distinguish inks and highlight microscopic spectral differences across a user-defined spectrum with a continuous 400 – 1000 nm Infrared bandpass filter and imaging system.

HDR HIGH DYNAMIC RANGE



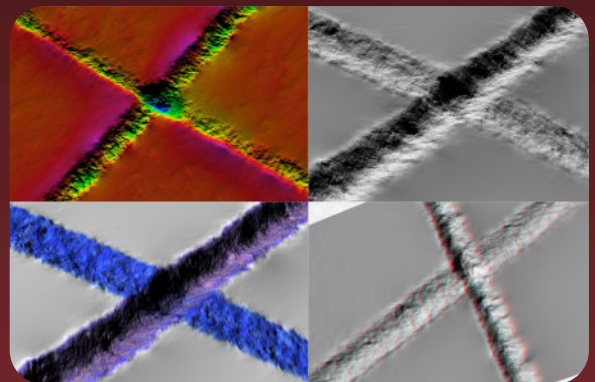
The HDR function allows to reduce reflections on metallic and shiny surfaces. The HDR function automatically captures 4 images in different exposure times and then combine them together to form a reflection-reduced image.

SPECTROSCOPY



Identify minute differences in inks and papers using spectral analysis, precise to 2.4 nm resolution, within a range of 360 – 1100 nm. Includes Spectrometer and software.

3D CAPTURE



View indentations and textures by acquiring images with four oblique lighting angles simultaneously. Highlight and visualize differences by applying virtual lighting and colour processing.

DATABASE MODULE

Catalog and search through collected images using metatags and class characteristics.

TRAVEL DOCUMENT AND BANK NOTE DATABASES

Compare with thousands of reference images of collected passports and banknotes.

BARCODE AND MRZ-DECODER

Read 1D and 2D barcodes, MRZ information and more on passports - no additional hardware is needed.

LETTERSCREEN++® / DIGITAL IPI™

Decode proprietary Letterscreen++ and Digital IPI on passports.

TECHNICAL SPECIFICATIONS

POWER

Switchable Power Supply:

115 V 60 Hz +/- 10% or 230 V 50 Hz +/-10%

Max. consumption: 400 W

DIMENSIONS

Weight: approx. 105 kg

Dimensions: approx. 959 mm x 607 mm x 588 mm (W x D x H)

CAMERA RESOLUTION

SpectraPro+ : 24,5 MP, magnification up to 500x

SpectraPro : 10 MP, magnification up to 224x

CAMERA FILTER

350 - 1100 nm, 350 - 680 nm, 530, 550, 570, 590, 610, 630, 645, 665, 695, 715, 735, 760, 780, 830, 900, 1000 nm plus OASIS and POL

LIGHTING

Visible / IR Lighting:

Incident / Flood, Top Side, Side left / right, LED ring light array, Retro/coaxial illumination, Anti-Stokes 740 - 1000 nm

UV illumination: UVA 365 nm, UVB 313 nm, UVC 254 nm

Transmitted light: visible / IR, Spot, UVA 365 nm

IR-LUMINESCENCE

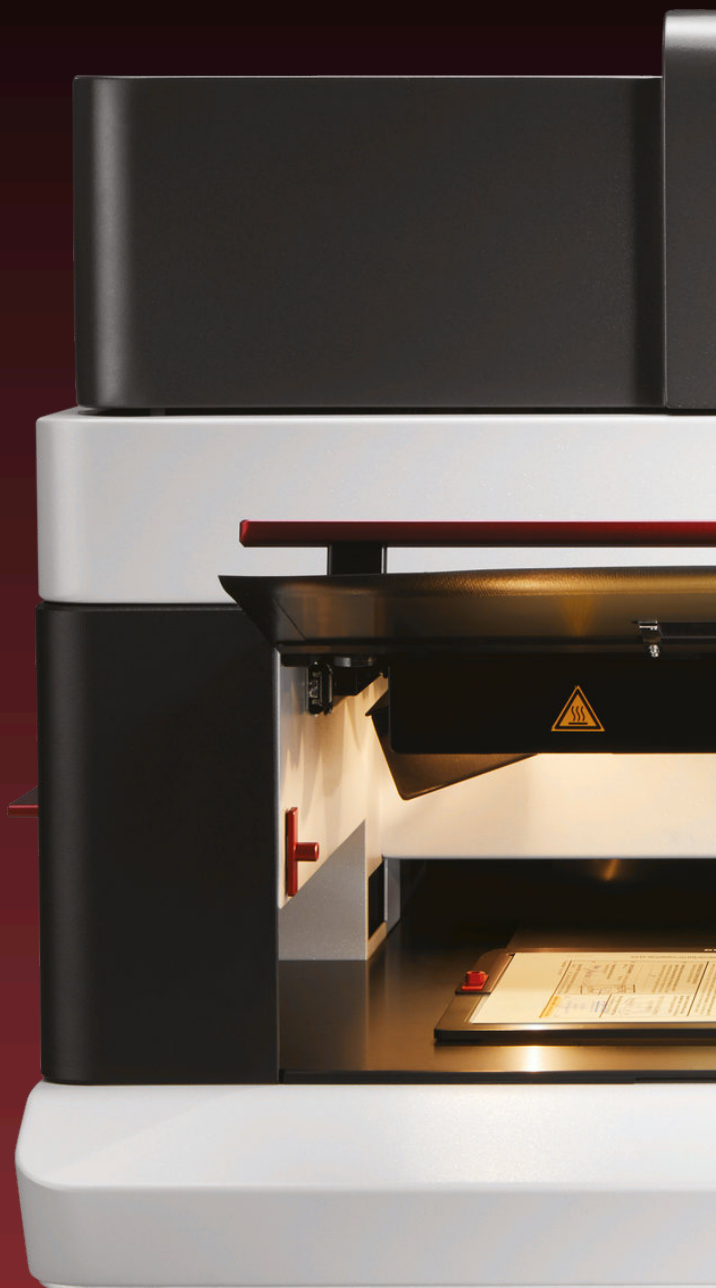
113 Excitation filter combinations

15 High pass filter: 380 (N), 420, 435, 455, 475, 495, 515, 530, 550, 570, 590, 610, 630, 645, 665 nm

12 Low pass filter: 420, 450, 490, 530, 570, 620, 650, 680, 720, 730 and 800 nm and DOCU (380 - 570 nm)

OPTIONAL

Projectina Face Verifier (PFV)



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www.projectina.ch