

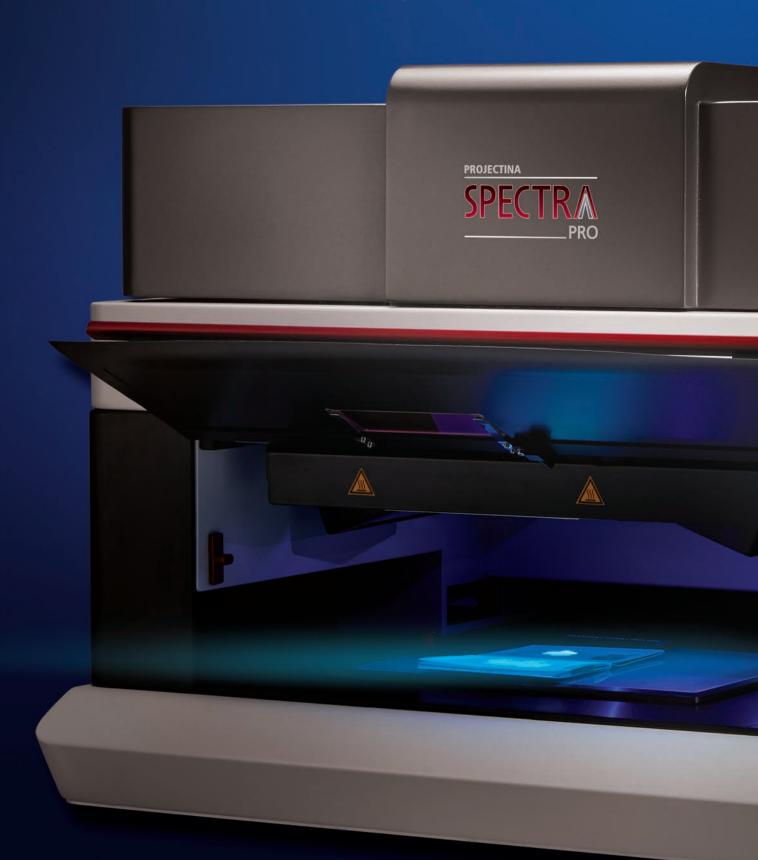
# THE ULTIMATE DOCUMENT EXAMINATION SYSTEM



STATE-OF-THE-ART SPECTRAL ANALYSIS

FORENSIC LABS • SECURITY PRINTERS • IMMIGRATION AUTHORITIES

# WHEN **DETAILS MATTER**



# PROJECTINA 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** can also be equipped with a **wide range of accessories and modules** to suit any document examination **application**.

# EXCEPTIONAL IMAGING

**Spectra Pro** incorporates class-leading optical technology to provide unprecedented image quality and enhanced viewing options.

# VIEW REMARKABLY SHARP IMAGES AT ALL WAVELENGTHS

Spectra Pro's 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.

### **FXAMINE MICROTEXT FASILY**

Spectra Pro's industry-leading optical magnification of up to 335x enhances the ability to inspect microtext, fibers and other microscopic security features.

## SEE MORE, SAVE TIME

A broader 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 so predefined processes can be automated an incredible time-saver for routine or bulk examination.

## **STREAMLINE EXAMINATION**

Spectra Pro's 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.

## RFFOCUS 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**'s 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
- > Anti-Stokes inks
- > Retro-reflective features
- > Optically variable inks
- > Phosphorescent inks

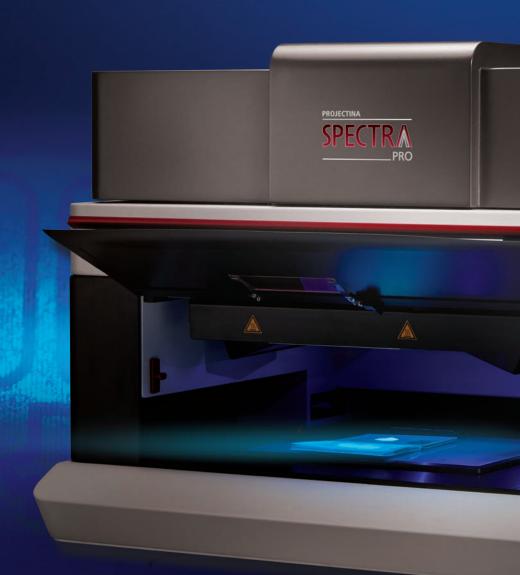
- Watermarks
- > Laser images and engravings
- > Latent images
- **>** Birefringent features
- > Stamps and embossing
- > Fibers and other paper security features



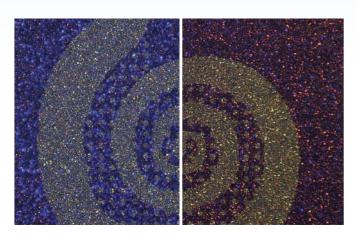
#### TRANSMITTED LIGHTING



MICROTEXT UNDER HIGH MAGNIFICATION



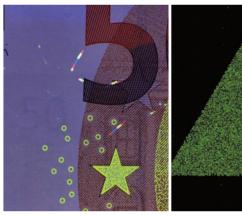
# IN-DEPTH INSPECTION



**POLARIZED FEATURES** 



**ANTI-STOKES SECURITY FEATURES** 



**UV INK AND FIBERS** 

**PHOSPHORESCENCE** 





**HOLOGRAM WITH LED RINGLIGHT** 





IR LUMINESCENCE



# 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's 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 user-defined spectrum with a continuous 400–1000 nm infrared 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's 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**





## **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 passport scanner employs RFID, smart card and magnetic stripe readers for scanning passports, visas, IDs, and drivers licenses, and a software module that decodes MRZ (Machine Readable Zone) information and barcodes.



SON SON SON

**IPI - INVISIBLE PERSONAL INFORMATION** 

# OPTIONAL MODULES AND ACCESSORIES

## **EXAMINATION ACCESSORIES**



**OVI MIRROR** View color shifts in Optically Variable Inks



MAGNETIC INK PROFILER
Visualize magnetic inks, with USB connection and software



**EDGE SEAL MIRROR**View laser engraving on sealed edges of ID cards



**CARD HOLDER**Hold standard size ID cards for UV examination



**TILT PLATE**View and record OVDs, holograms and kinegrams



**QUARTZ GLASS PLATE**Flatten documents and prevent movement during examination 250 mm x 200 mm x 6 mm



**PAGSCAN**Scan MRZ and barcodes on passports, read RFIDs and smartcards, with USB connection and software



# MICROSCOPE OPTION

#### PAG 1000 STEREOMICROSCOPE

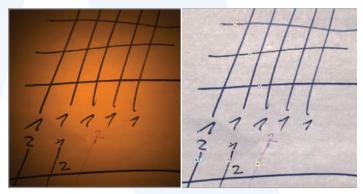
Versatile stereomicroscope with 8x optical zoom for total magnification of up to 60x and optional high-resolution digital camera.

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

Additional options available.

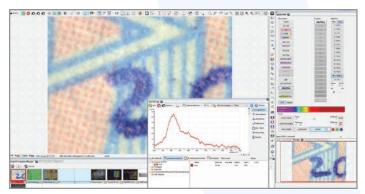
# SOFTWARE MODULES

### 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.

## **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.

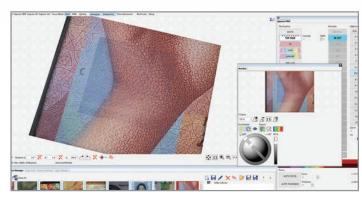
## DATABASE MODULE

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.

# EXTENDED DEPTH OF FOCUS (EDF)



Capture an all-in-focus 3D image, simulate lighting angles and intensities, use the rendering to show details in reports and highlight differences in textures, or view on screen with included 3D glasses.

### 3D LIGHTING



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

## BARCODE AND MRZ DECODER

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

# LETTERSCREEN++® AND DIGITAL IPI™

Decode proprietary Letterscreen++ and Digital IPI on passports.

# **TECHNICAL SPECIFICATIONS**

#### **POWER**

Switchable Power Supply:

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

Max. Consumption: 400 Watts

#### **DIMENSIONS**

**Approximate Weight: 87 kg** 

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

#### **IMAGING**

Magnification: Up to 335x on 30" Monitor

Max. Field of View: 224 mm x 168 mm

Camera: USB 3.1 connection, Ultra IR sensitive CMOS

#### LIGHTING

#### Visible / IR Lighting:

Incident / Flood, Top Side, Side Left / Right, LED Ringlight Array, Retro / Coaxial

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

Transmitted Light: Visible / IR, Spotlight, UVA 365 nm

#### IR LUMINESCENCE

113 Emission Filter Combinations

**15 High Pass Filters:** 380, 420, 435, 455, 475, 495, 515, 530, 550, 570, 590, 610,630, 645, 665 nm

**11 Low Pass Filters:** 420, 450, 490, 530, 570, 620, 650, 680, 720, 730 and 800 nm



Follow us on











**ELECTRONICS** 







TECHNOLOGY