

PROJECTINA

**SPECTRA**  
PRO

# THE ULTIMATE DOCUMENT EXAMINATION SYSTEM

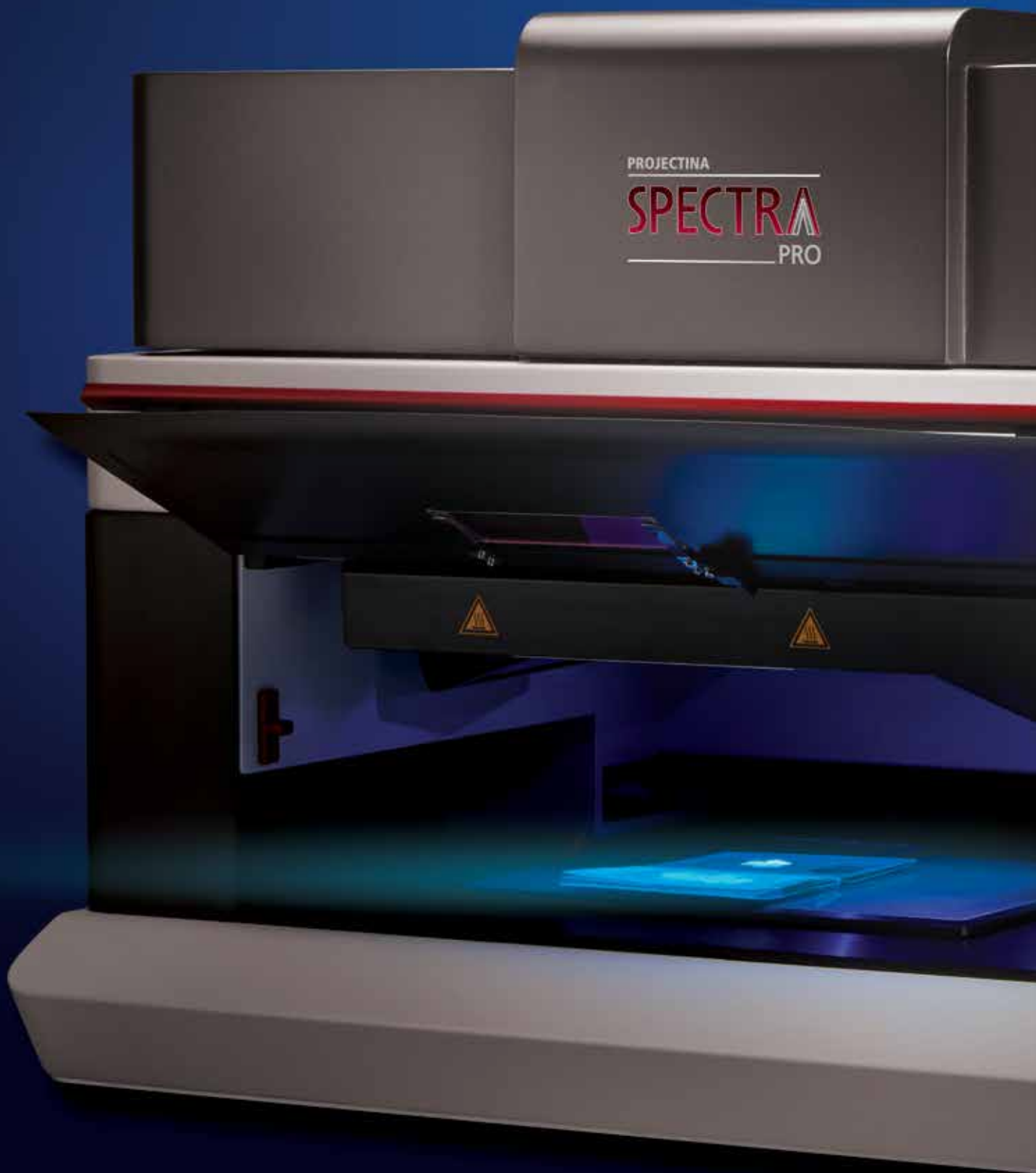


STATE-OF-THE-ART SPECTRAL ANALYSIS

FORENSIC LABS • SECURITY PRINTERS • IMMIGRATION AUTHORITIES

**projectina**<sup>®</sup>

# 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.

## EXAMINE MICROTTEXT EASILY

Spectra Pro's industry-leading optical magnification of up to 224x on a 32" 4K monitor (with 10MP camera) 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 redefined 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.

## REFOCUS FASTER

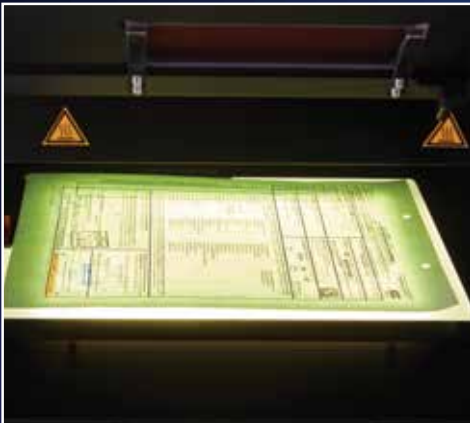
A unique Spectral Focusing feature allows Spectra Pro to automatically refocus with greater speed and precision when changes are made to lighting and magnification.



# FULL-SPECTRUM LIGHTING

**Spectra Pro'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.

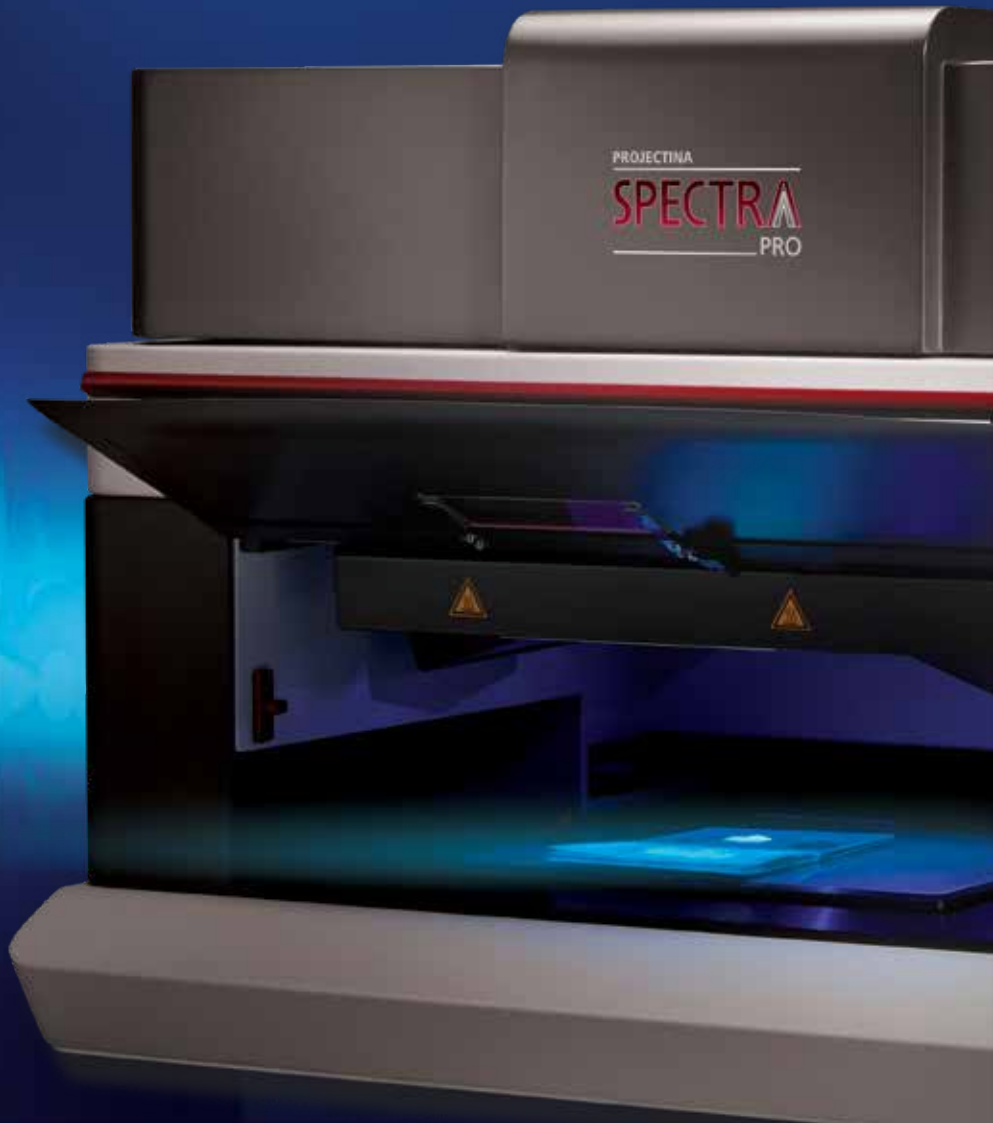
- UV activated security features
- OVDs, holograms and kinograms
- IR illumination "anti-Stokes"
- Retro-reflective features
- OVI Optical Variable Ink
- Phosphorescent inks
- Watermarks
- Laser images and engravings
- Latent images
- Birefringent features like e.g. SICPA OASIS®
- Stamps and embossing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



TRANSMITTED LIGHTING

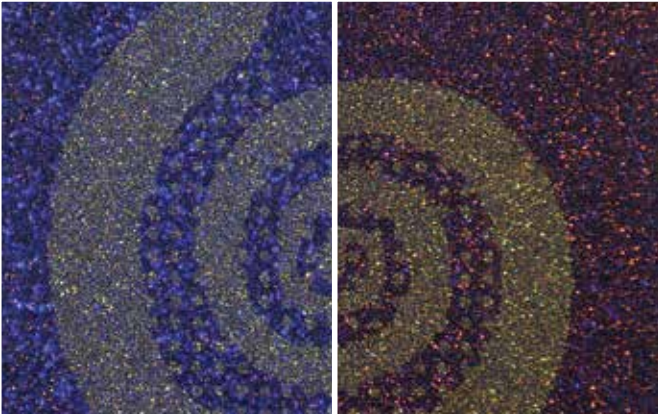


MICROTEXT UNDER HIGH  
MAGNIFICATION

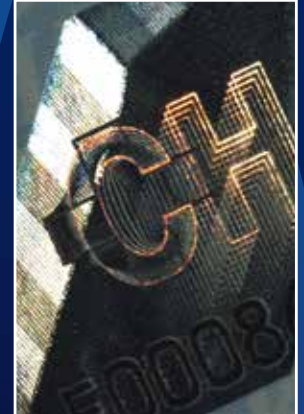




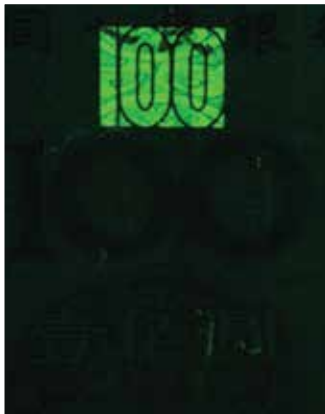
# IN-DEPTH INSPECTION



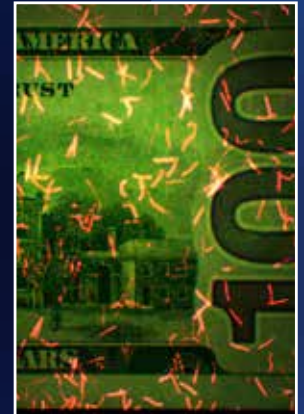
POLARIZED FEATURES



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'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

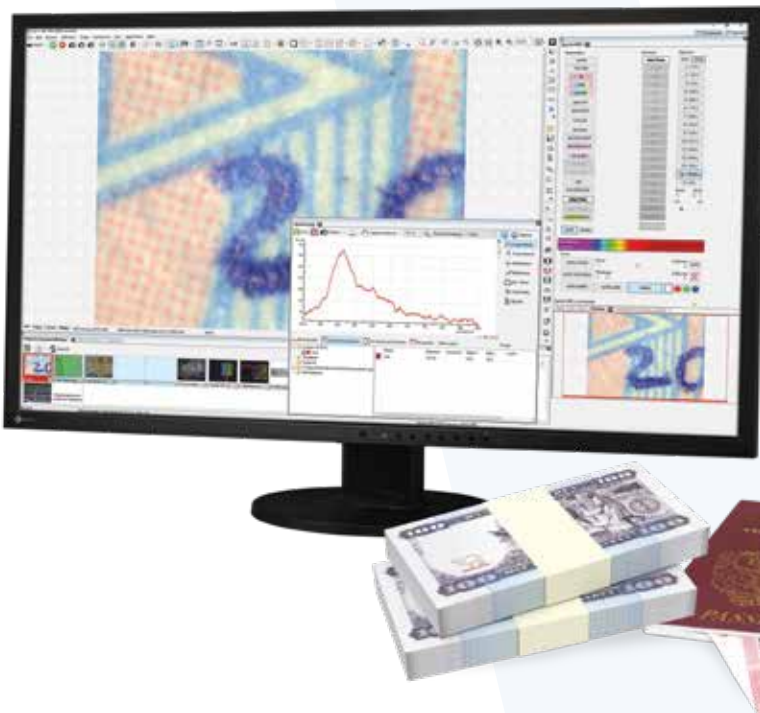
Now with a greater range of motion, the X/Y Translation Stage allows users to create large, high-resolution images and automate examination sequences, saving enormous time and effort.

### 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

Optical magnification up to 224x (on 32" 4K monitor with 10MP 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 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 examinations



### TILT PLATE

View and record OVDs, holograms and kinograms



### QUARTZ GLASS PLATE

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



### PAGSCAN 3000

Scan MRZ and barcodes on passports, read RFID's and smartcards, with USB connection and software



## MICROSCOPE OPTION

### PAG 1000 STEREO MICROSCOPE

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

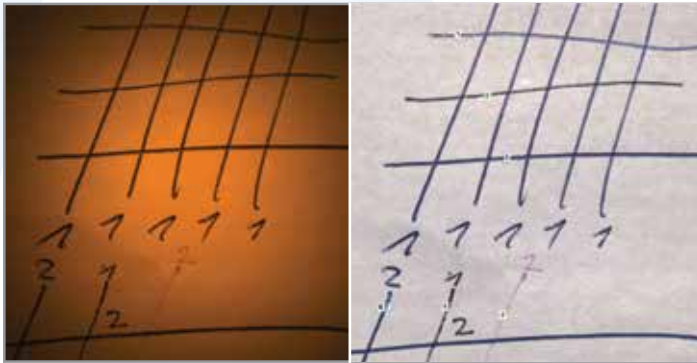
Ergonomic binocular tilts from 0 to 30 degrees for examiner comfort. Includes two spotlights and ringlight with 4 selectable segments.

Additional options available.



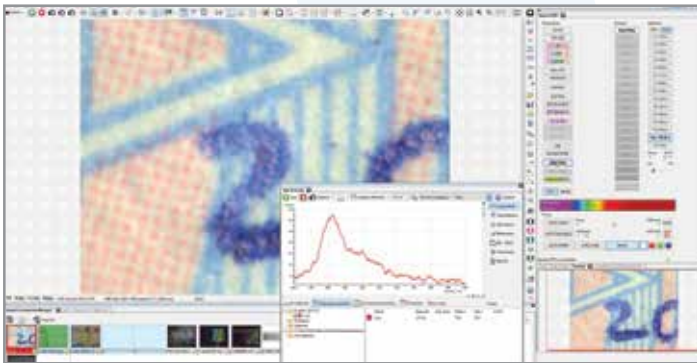
# SOFTWARE MODULES

## 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

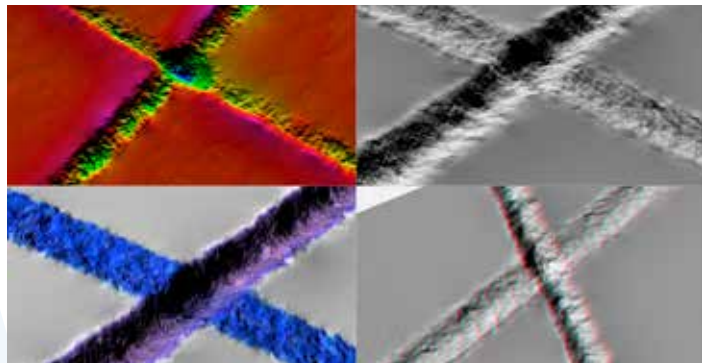
Compare with thousands of reference images of collected passports and banknotes.

## HDR HIGH DYNAMIC RANGE



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

## 3D CAPTURE



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++® / 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 Watt

## DIMENSIONS

**Weight:** approx. 87 kg

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

## IMAGING

**Magnification:** up to 224x on 32" 4K monitor

**Max. Field of view:** 214 mm x 179 mm

**Camera:** 10 MP, USB 3.1 connection, Ultra IR sensitive CMOS

## 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:** UV-A 365 nm, UV-B 313 nm, UV-C 254 nm

**Transmitted light:** visible / IR, Spot, UV-A 365 nm

## IR-LUMINESCENCE

113 Emission 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)

