

PROJECTINA

**SPECTRA**  
FLEX

# THE FLEXIBLE DOCUMENT EXAMINATION AND SCANNING SYSTEM



**projectina®**



## MULTI-APPLICATION SPECTRAL ANALYSIS FOR FORENSIC LABORATORIES, IMMIGRATION AUTHORITIES, INSURANCE AND BANKING

The Spectra Flex introduces features not previously available in the mid range category, all within a modular design



### SUPERIOR OPTICAL IMAGE QUALITY

CRYSTAL CLEAR  
IMAGE FROM EDGE  
TO EDGE WITH  
INTEGRATED  
AUTOFOCUS

### EASY CHECK & EASY SCAN

FULLY AUTOMATIC  
RESULTS AT ONE  
CLICK.



### HALO RING LIGHT

VISUALIZE ANY  
HOLOGRAM,  
KINEGRAM AND  
OVD/OVI

### BUILT-IN CONTROL UNIT

COMPACT  
SYSTEM, WITHOUT  
THE NEED FOR AN  
EXTERNAL  
COMPUTER



### MAGNIFICATION UP TO 108x

### MOTORIZED X/Y TRANSLATION STAGE

STORES DIFFERENT  
POSITIONS



### SUPERIOR ILLUMINATION ALL-LED LIGHTING

### ADVANCED IMAGING

A4 CAPTURE  
CAPABILITIES  
FOR LARGER  
DOCUMENTS OPEN  
SIDE AND BACK  
DOORS



**MULTIPLE USB PORTS**  
FOR EASY FILE  
TRANSFER AND  
CONNECTION OF  
EXTERNAL DEVICES



**EMBEDDED PC AND  
FULL SOFTWARE  
SUITE**  
SAVE SPACE AND  
INCREASE MOBILITY



**HIGH  
DOCUMENTS**  
CAPTURE LARGE  
OBJECTS UP TO  
120 mm THICK



**REMOTE  
COLLABORATION**  
REMOTE EXAMINATION  
AND VERIFICATION IN  
REAL TIME

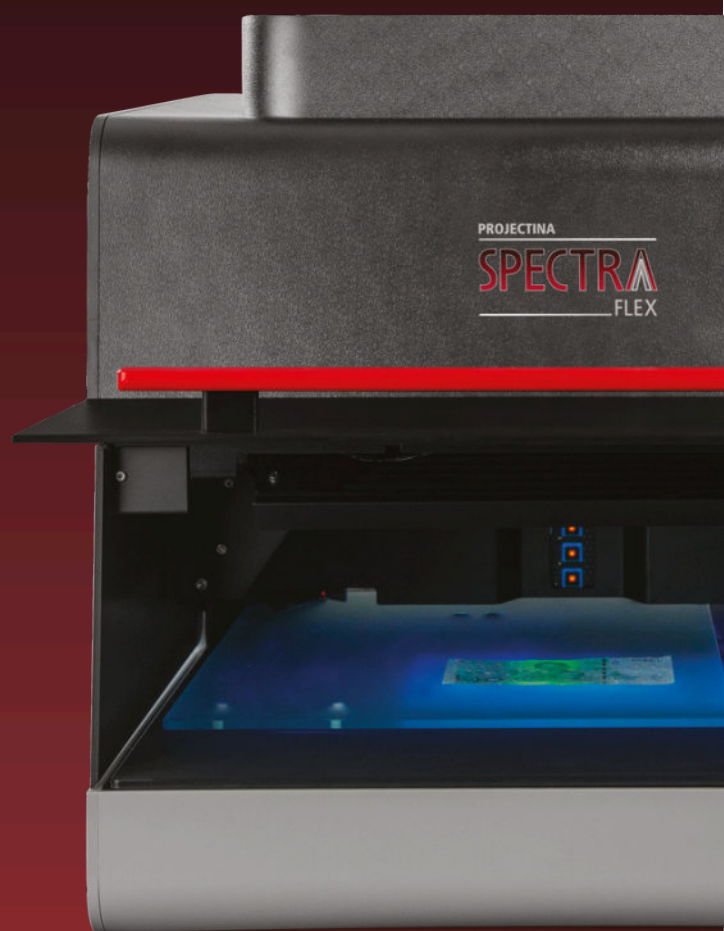
# DOCUMENT EXAMINATION TAILOR-MADE FOR YOUR APPLICATION

Projectina **Spectra Flex** provides examiners with all options they need.

**Spectra Flex** is equipped with FlexBand MSL™ multispectral illumination and a unique Halo Ringlight™. With integrated autofocus for focussed fast image display. In addition, a motorised X/Y-positioning table and an extra large field of view in A4 format are integrated, which allows one-click capture of large documents such as bills of lading, vehicle registrations, personnel documents and much more. The built-in X/Y-stage is an outstanding scanner solution for capturing high-resolution images in combination with the integrated light sources.

And it's modular: agencies that don't need the full range of options can choose the features they want for their specific application.

This flexibility results in greatly-reduced cost-of-ownership, and makes **Spectra Flex** the wise choice for a wide range of organizations, such as forensic laboratories, immigration authorities and banks.



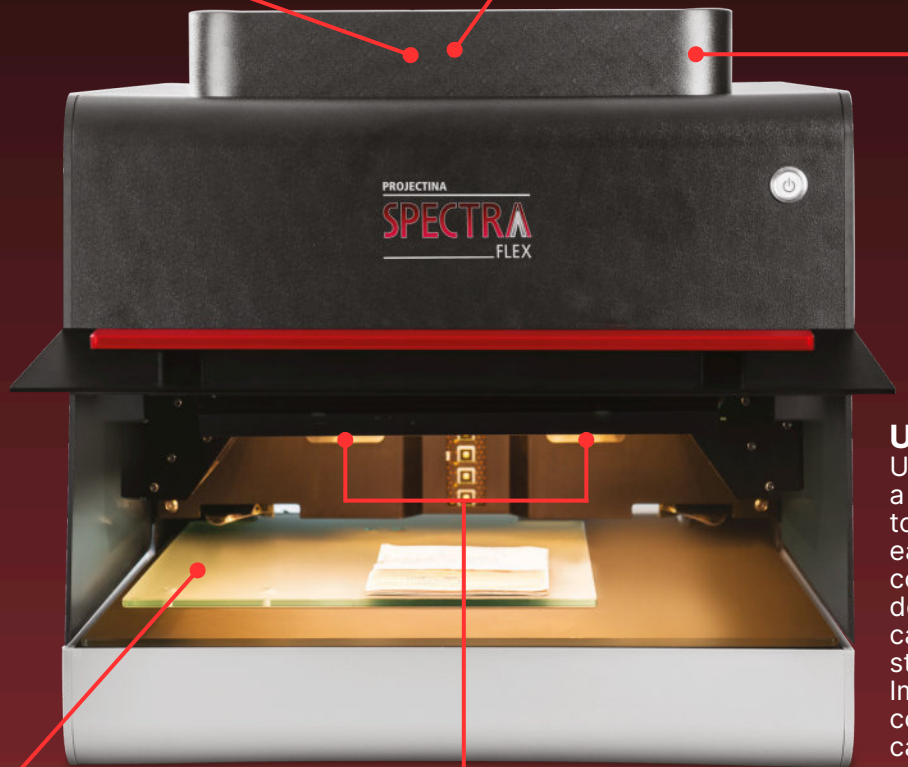
# ADVANCED TECHNOLOGY

## HIGH MAGNIFICATION

Magnification up to 108x allows examination of microprinting, paper structure, fibres, and perforations.

## ADVANCED IMAGING

With A4 capture capabilities, Spectra Flex speeds up and simplifies the process with an extra-large field of view that captures full-sized documents such as bills of lading, breeder documents, and open passports, in one click.



## BOOST THE EXAMINATION WORKFLOW

Spectra Flex has an optional state-of-the-art motorized X/Y translation stage providing a high resolution scanner solution for capturing hires images with integrated light sources. Combined with user defined presets, it stores the exact position of security features that need to be examined and analyzed on bank notes, passports, travel documents, etc. By moving to predefined positions on a document with precision and no need for manual interference, examiners can spend less time positioning and more time analyzing.

## USB

USB ports, including a convenient top USB slot, allow for easy file transfer and connection of external devices such as cameras for stereoscopes. Images from connected devices can be viewed using the Spectra Flex software.

## SUPERIOR ILLUMINATION

Spectra Flex's all-LED lighting gives examiners the ability to create the precise lighting environment needed to examine even the most advanced security features. This includes a 46-LED Halo Ringlight™ with automated rotation, as well as all new FlexBand MSL™ LEDs that can be individually selected, dimmed, and combined for precise replication of colour spectra for viewing ink differences and IR luminescent security features.

# ENHANCED FUNCTIONALITY

## OPTIONAL EMISSION FILTERS

Choose between 8 and 15 emission filters depending on the need and application.

## EMBEDDED PC

Spectra Flex contains an embedded PC and full software suite. Save space, increase mobility, and focus on inspection without having to worry about operating systems, updates and obsolescence. Simply connect a monitor, mouse, and keyboard to get started.

## NETWORK COMPATIBILITY

Save images directly to shared network locations or access locally stored images from other network stations.

## TRANSMITTED LIGHTING

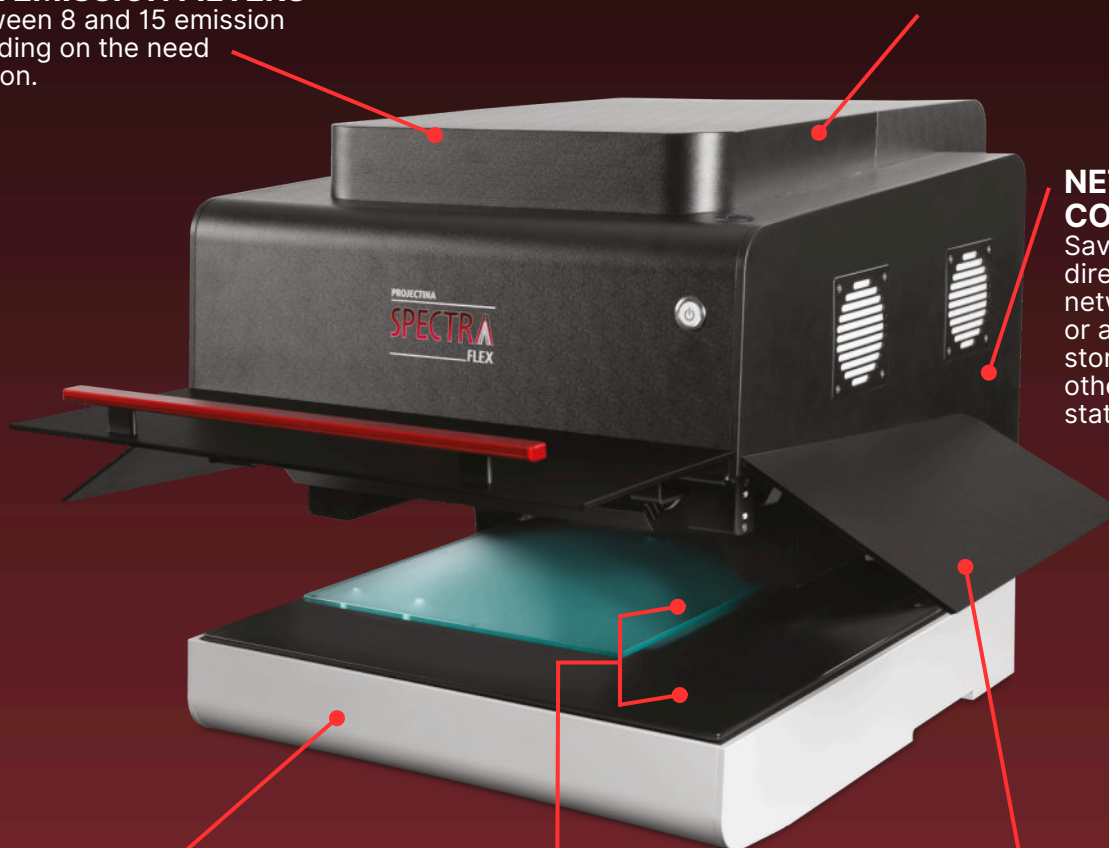
Bottom transmitted white/IR light, UVA light as well as a high intensity spot light allows viewing of watermarks and other covert security features.

## SIDE OPENINGS

Examine extra large documents simply by opening side and back doors, without the need to damage or fold documents.

## HIGH DOCUMENTS

Capture images of books, high documents and other large objects up to 120 mm thick with automatic focal height adjustment and large examination area.



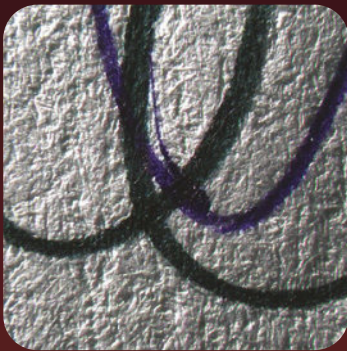


# FULL-SPECTRUM LIGHTING

**Spectra Flex** offers all-LED lighting options, so agencies can choose the lighting they require for their specific application.

## BENEFITS OF ALL-LED LIGHTING:

- LEDs have a much longer lifespan with a much lower overall energy draw
- Eliminates the need to monitor lamp lifetimes and change bulbs
- LED arrays are more robust
- Small LEDs provide more workspace allowing examiners to reproduce the exact lighting conditions they require



## SIDE LIGHT

Left and right side lights can be simultaneously or separately engaged to show paper structures and mechanical surface alterations such as cuts and pastes, and to visualize latent printing techniques.



## COAXIAL LIGHTING

Coaxial or retro reflective lighting is available for examining surface structures of reflective elements.

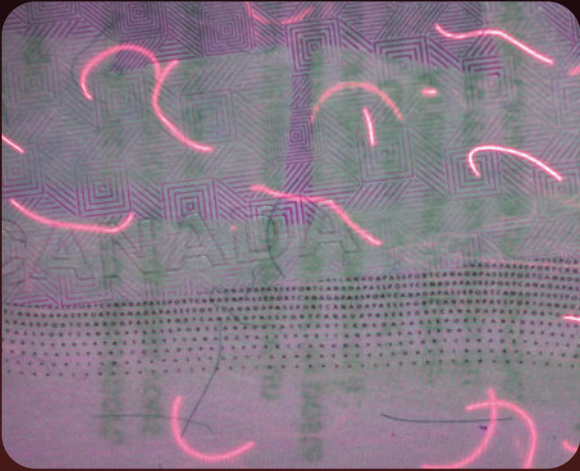


## IRT (INFRARED TRANSMISSION LIGHT)

Neutralisation of the security backgrounds TD1 and TD3 and visualisation of the transparency window with just one click.

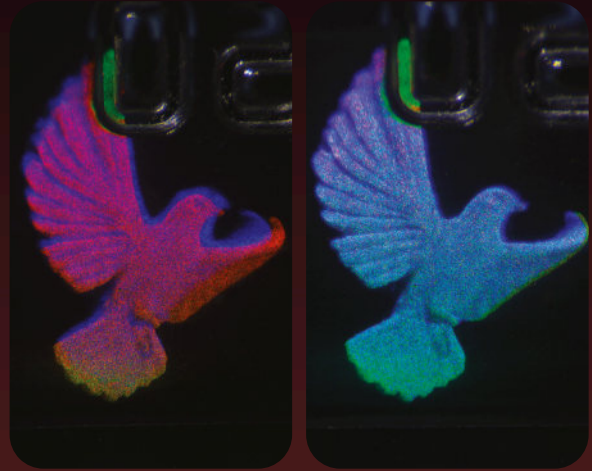


# SEE EVERY **DETAIL**



## **FLEXBAND MSL™ TECHNOLOGY**

FlexBand MSL (Multi Spectral Lighting) technology provides narrow band LEDs that can be dimmed and mixed for narrow band IR luminescence applications, such as viewing security features and different luminescent ink properties. Together with 8 or optionally 15 emission filters, examiners can visualize minute differences with precise conditions.



## **THE HALO RINGLIGHT™**

Spectra Flex features a unique and powerful 46-LED Halo Ringlight with individually selectable LEDs and segments that can be rotated with variable speed and captured in a video sequence. Examiners can pause and playback to see different refractive results on optically variable devices such as holograms and Kinegrams™ to visualize and capture irregularities.



## **LIVE ANTI-STOKES**

High intensity IR LEDs allow the examiner to visualize a Live image of Anti-Stokes ink, allowing them to optimize placement for capture while the feature is illuminated.



## **ULTRA-VIOLET LIGHTING**

Visualize shortwave security features under UVA, UVB and UVC lighting, as well as a transmitted (bottom) UVA option for hidden and translucent UV features.

# MODULAR SYSTEM

**Spectra Flex** combines industry-leading technology with flexible modular configuration options so that examiners in a variety of fields can conduct comprehensive examination of questioned passports and other travel documents, identification papers, security and legal documents, and currency.

## IMMIGRATION AND BORDER AUTHORITIES

**Spectra Flex's** advanced spectral analysis technology allows 2nd line immigration and border authorities to perform in-depth analysis of questioned documents detected in the 1st line.

- Image full A4/Letter documents including bills of lading, commercial invoices, and vehicle registration papers
- Capture full open passports

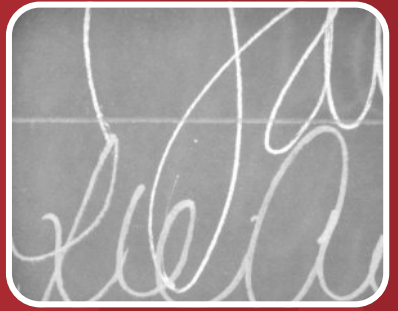
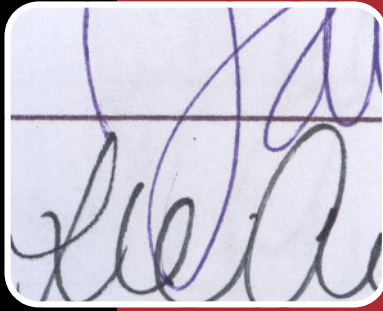
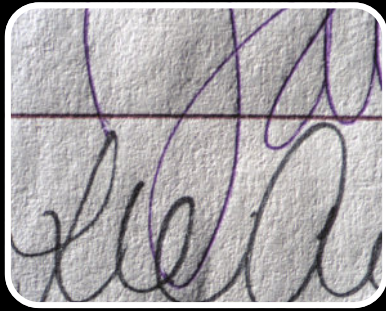
## INSURANCE AND BANKING

With its full software suite, **Spectra Flex** is the ideal tool for verifying security features associated with banknotes and financial documents.

- Verify currency by easily visualizing security features to quickly detect suspected counterfeits
- Authenticate applicants by easily verifying ID documents, transcripts, and cheques
- Recognition of photocopies







## FORENSIC LABORATORIES

**Spectra Flex's** range of spectral imaging modules help document examiners easily detect and record even the slightest alterations on questioned documents.

- Verify printing techniques with high magnification on documents and currency
- Confirm forgeries on documents such as contracts, birth certificates, and transcripts
- Capture images of falsifications for records and casework



# OPTIONAL MODULES AND ACCESSORIES

## EXAMINATION ACCESSORIES



### OVI MODULE

View colour shifts in  
Optically Variable Inks



### EDGE SEAL MODULE

View laser engraving on  
sealed edges of ID cards



### TILT PLATE

View and record OVDs,  
holograms and Kinegrams



### E-PASSPORT READER PAGSCAN 2000

Read RFID, MRZ, Barcodes  
and Smartcards

## MICROSCOPE OPTION

### PAG 800 STEREO MICROSCOPE INCL. HIGH-RESOLUTION USB 3 CAMERA

Versatile stereo microscope with 8-50x  
optical zoom for up to 50x magnification and  
optional  
high-resolution digital camera.

Includes two spot lights and a ring light with  
4 selectable segments.

This additional image option is directly  
available in the Spectra Flex software.



# SOFTWARE FEATURES

The all-new **Spectra Flex** software suite gives examiners more features and tools than ever before, without the need for an external computer – everything is built-in.

## SOFTWARE FEATURES

### COMPLETE REMOTE CONTROL

- Control magnification, lighting, filters and stage movements
- Capture images and store them in the internal file manager or transfer them easily to USB

### ANNOTATIONS AND MEASUREMENTS

- Annotations and calibrated measurements can be applied directly to live and captured images
- Choose font colour and size, change colour of shapes, fill and outlines, and choose whether or not to save and print the notes with the image

### AUTOMATED IMAGE INFORMATION

- Images can be automatically stamped with metadata such as time and date, filename, image processing applied, magnification, lighting and more

### COMPARISON TOOLS

- Comparison mode allows the examiner to compare a live image to a stored or reference image with a vertical, horizontal or polygonal split line
- Save snapshots of the comparison for reference and sharing

### IRT INFRARED TRANSMISSION LIGHT

- New illumination for verification of see-through windows in identity cards/passports in IR and transmitted light by one click.

### TRAVEL DOCUMENTS

- External passport reader for MRZ, barcodes, smartcards and more
- Software module for IPI, ICI, Digital IPI and LetterScreen++

### HDR

- High Dynamic Range image capture allows optimal image exposure for high reflectance or uneven surfaces

### CAPTURING HIGH RESOLUTION IMAGES

- High resolution scanning solution for capturing high resolution images using the integrated light sources together with the X/Y translation stage.



# TECHNICAL SPECIFICATIONS

## POWER

Power Input: 100-240 V 50/60 Hz

Power Rating: 500 W

## DIMENSIONS

Approximate Weight: 35 kg

Approximate Dimensions: 496 mm x 600 mm x 496 mm (W x D x H)

## OPTICS

### SUGGESTED MODELS

Lite Standard Advanced

Optical Magnification: up to 108x on 27" monitor, up to 95x on 24" monitor

X

X

X

Max Field of View: 174 mm x 98 mm

X

X

Max Field of View A4/letter: 300 mm x 222 mm

X

## EMISSION FILTERS

8 filters 580 nm, 630 nm, 700 nm, 735 nm, 780 nm, 1000 nm, neutral 420 - 1100 nm and IR CUT filter

X

15 filters 550 nm, 565 nm, 580 nm, 610 nm, 630 nm, 640 nm, 670 nm, 700 nm, 720 nm, 735 nm, 780 nm, 830 nm, 1000 nm, Neutral 420 - 1100 nm and IR CUT filter

X

X

## LIGHTING

White Light

X

X

X

IR Light

X

X

X

Side Light

X

X

X

UVA

X

X

X

Halo Ringlight™ (46 LEDs)

X

X

X

FlexBand MSL™

White, Violet, Blue, Cyan, Green, Amber and Red LEDs, dimmable and selectable individually or create combinations

X

X

X

Transmitted (Bottom) White

X

X

X

Transmitted (Bottom) UVA

X

X

X

UVB, UVC

X

X

Retro/Coaxial

X

X

Anti-Stokes

X

X

## TRANSLATION STAGE

Motorized X/Y Translation Stage (scanner solution)

Optional

## TRAVEL DOCUMENTS MODULE

External passport reader with software module for MRZ, Barcodes, IPI, ICI, digital IPI, Letterscreen++ and RFID chip reading

Optional

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