

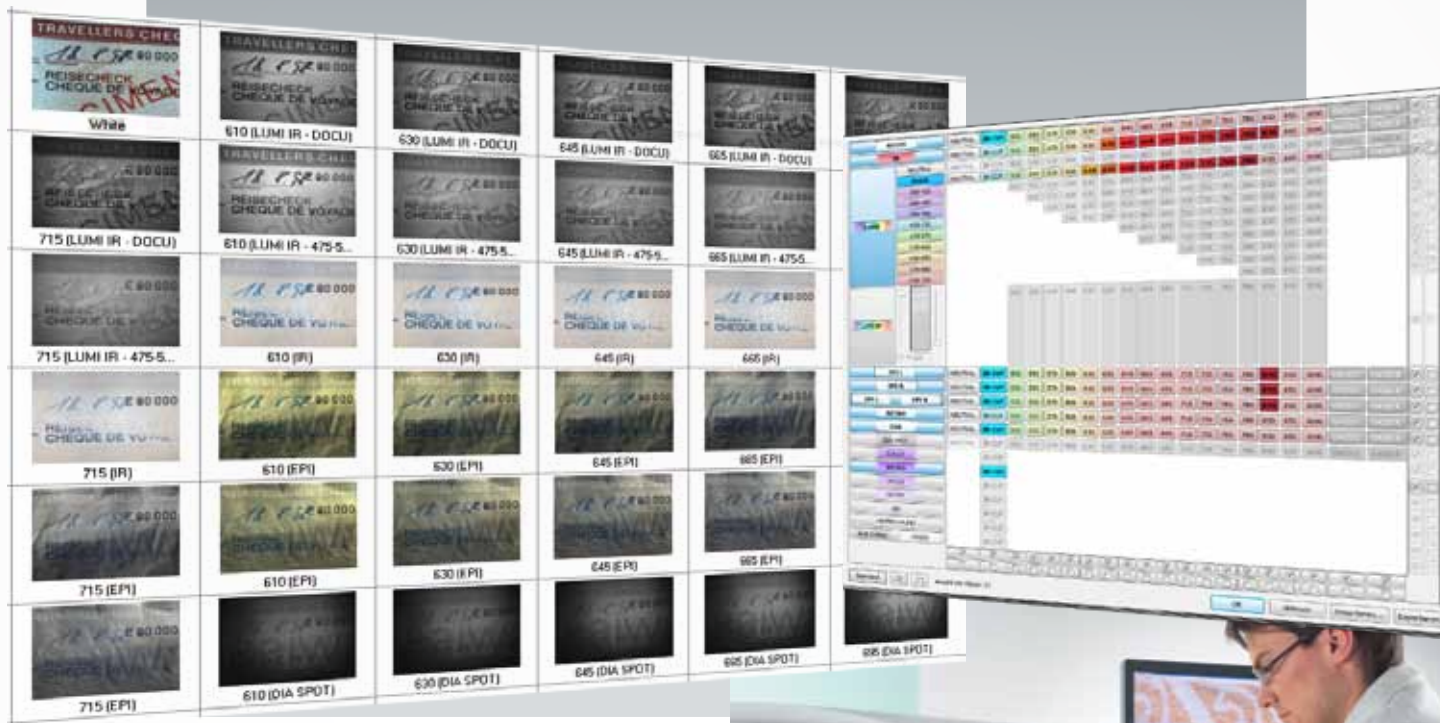
DOCUCENTER NIRVIS

The leading system for document analysis captivates through its high userfriendliness and comprehensive scope of performance.





VISUALISATION OF RELEVANT SECURITY ELEMENTS, COMPARISON AND DOCUMENTATION IN AUTOSCAN MODE



DOCUCENTER NIRVIS fulfills all demands.

DOCUCENTER NIRVIS is the leading instrument for manual and automatic document examination. Excellent optics in combination with high resolution digital cameras permit investigation from shortwave UV to IR and IR luminescence range.

The modular concept of the DOCUCENTER NIRVIS comprises a smoothly harmonised system from optical acquisition to computer assisted analysis up to systematic storage of image and measuring data.

New: Visualisation of „anti-Stokes inks“ in a wide band range from 740 - 1100 nm.

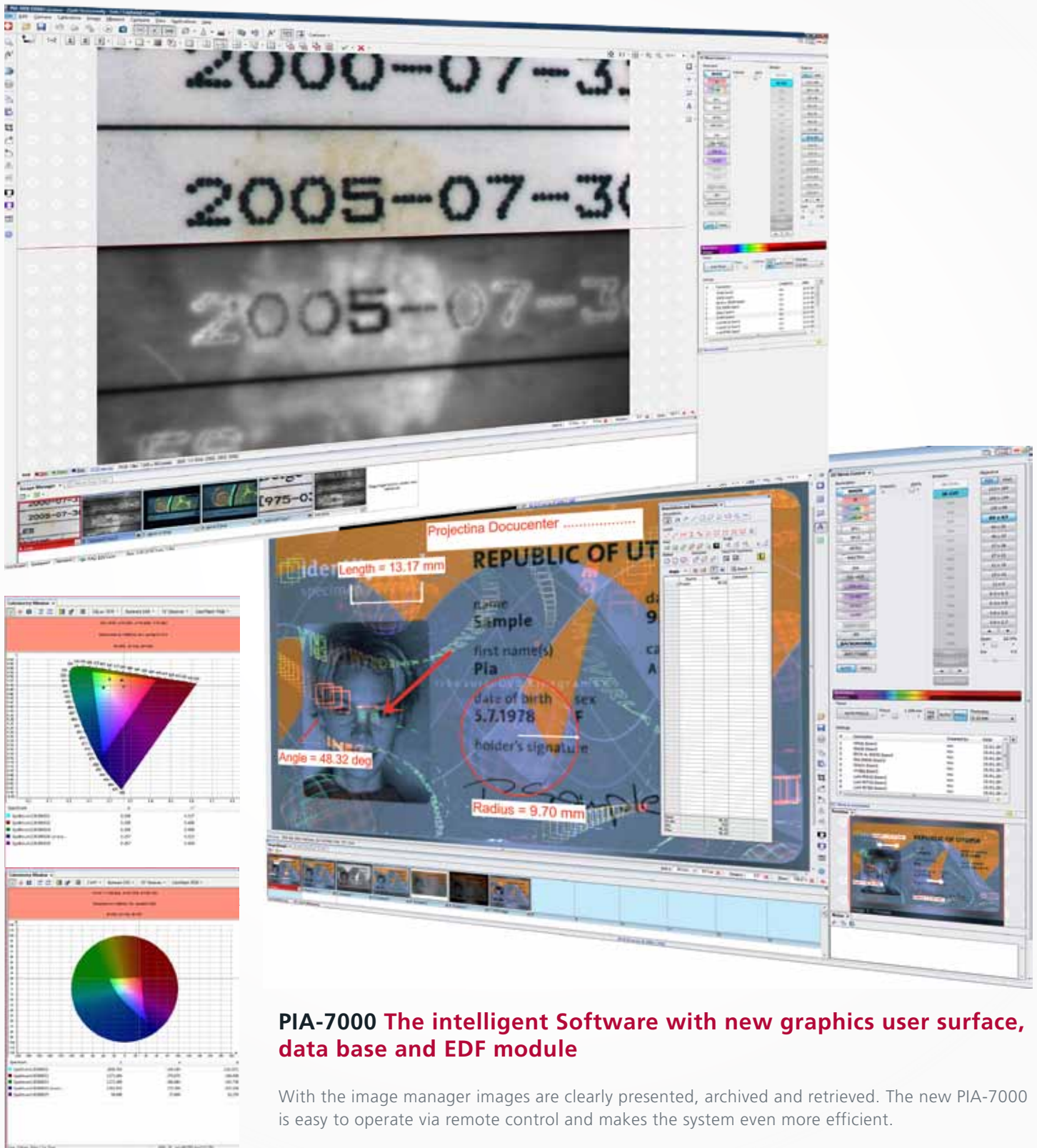
New: Visualisation of SICPA OASIS® security features and visualisation of the hidden personal information IPI/ICI.



PIA-7000 Easy comparing, measuring, analysing and archiving.

The intelligent software package PIA-7000 provides user support in document examination, writing and representation of reports, setup of database and includes measuring possibilities for dimensional sizing. Illustration of the spectral curves in $L^*a^*b^*$ and CIE colours, displaying active ring light, etc.

New: EasyScan mode for automated investigation and differentiation of printing inks with various illumination and filter combinations.



PIA-7000 The intelligent Software with new graphics user surface, data base and EDF module

With the image manager images are clearly presented, archived and retrieved. The new PIA-7000 is easy to operate via remote control and makes the system even more efficient.



Efficient analysis and examination

Efficient analysis and examination of questioned documents like passports, banknotes, security papers, etc., in visual and IR range as well as in short, middle and longwave UV range. The implemented Spectroscopy Module permits spectral comparison investigations.

- Integrated high resolution IR colour digital camera with 5 megapixel
- Field of view 213x160 mm
- Automated control of all functions via PIA-7000 software
- Zoom optics for magnification range up to 175x
- Storing and retrieving of instrument settings and image data, 100 % reproducible
- LED ring-light illumination for OVD visualisation
- **NEW:** wide-band large area IR illumination for the examination of "anti-Stokes inks"



Comparative illustration of a document detail
left: forgery, right: original



Transmitted light examination of ImagePerf/TLI®



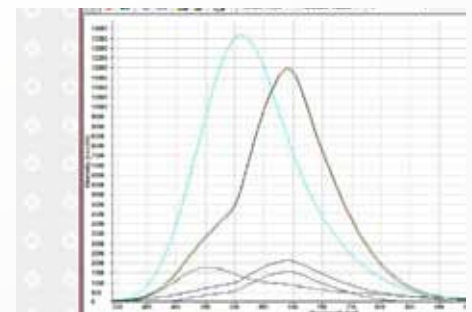
Security features in UV 365 nm



IR luminescence investigation to differentiate printing inks



Altered document number visible in vertical surface light; above: inclined surface light, below: vertical surface light



Colour Spectroscopy Module SP-2000: Spectrometer for measuring of colour spectra, colour measuring of L*a*b*/CIE colours



IPI Invisible Personal Information

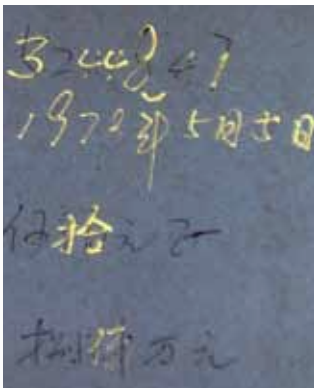


OVI Optical Variable Ink
above: original, below: forgery



MLI Multiple Laser Image
Visualization with side light

- **NEW:** Recording and storing of examination results via video sequences
- Spectroscopy measuring with 100% reproducibility and resolution of 6,4 nm, non-destructive investigation method
- RFID chip reader (optional) for reading the chip information in travel documents
- **NEW:** Multi-spectral Imaging Module in conjunction with PIA-7000 Software and continuous interference filter



Visualization of invisible ink with UV 254 nm



Visualization of latent security elements



Wide-band visualization of «anti-Stokes inks»



Laser engraving; original and forgery with side light



Intaglio printing with IR side light



Comparative illustration with IR absorption; above: original in visual light, middle: IR 850 nm absorption, below: forgery



Expert knowledge is the basis for the development of system solutions for document examination



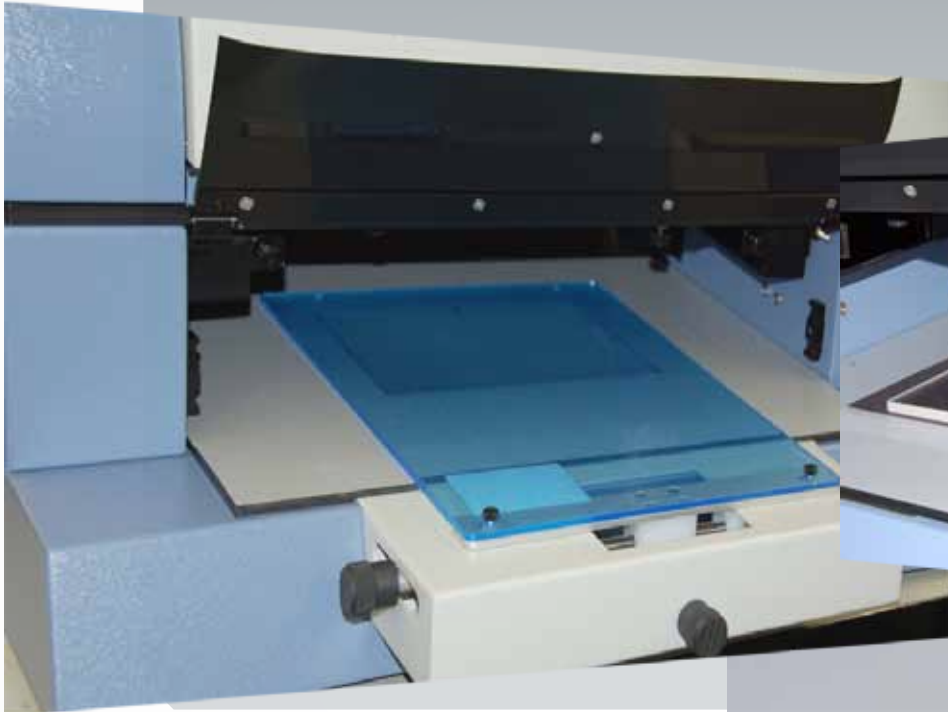
PAGScan Document Reader:

The new PAGScan Document Reader (White and IR Illumination) including RFID module, Smart Card Reader and Magnetic Stripe Reader, for PASSPORTS, VISAS, ID CARDS, DRIVER'S LICENSES, 2D BARCODE READING, etc.

In close cooperation with leading experts world-wide, we continuously redefine the requirements on the market to early recognize future trends and developments and implement them rapidly into our systems. Thus you are always ahead of a nose: For example with the DOCUCENTER NIRVIS and software tool PIA-7000.



USEFUL ACCESSORIES



X/Y translation stage for optimised positioning of documents



Magnetic Ink Detector:
Detector to visualize
magnetic ink in
documents

Quartz glass paper weights



Stereo-Zoom-Microscope PAG800:
The universal working place with high resolution digital camera
3.3 or 5.0 MP in combination with PIA-7000 software. Further
stereomicroscopes on request.

Basic System

Completely new redesigned system with 4 open sides for large documents, new integrated illumination systems, new designated optics, operation/remote control via PC/PIA-7000, different languages selectable, easy to operate, short user instruction time.

IR digital colour camera

High resolution colour IR digital camera with high IR sensibility, 5 MP resolution, spectral range 350-1000nm, Peltier cooling for long time exposure, integration up to 180 sec. for weak luminescences, predefined camera parameters for individual selection of light.

Optics/Magnification

22x Optical Zoom, motorized, autofocus, magnification range from 1.5x up to 175x on 30" TFT monitor

Digital Zoom

Adjustable Zoom factor from 1x - 8x for magnification up to 800x

Field of view

213x160 mm with lowest magnification

Ultraviolet

4x 6 Watt UVA lamp, 365 nm
2x 9 Watt UVB lamp, 313 nm
2x 9 Watt UVC lamp, 254 nm

Transmitted light UV, IR

UV: 2x 9 Watt, 365 nm
IR: 2x 50 Watt lamp, adjustable

Side light (EPI L+R), visual/IR

2x 50 Watt lamp, variable intensity control, light angle adjustable, ideal for visualisation of DynaPrint®, Latent Filter Image LFI®, Dynamic Laser Image DLI®, etc.

Retro light (RETRO)

1x 50 Watt light source, coaxial

IR Light

4x 35 Watt IR light source, adjustable

IR Luminescence (blue light)

1x 250 Watt halogen illumination with condensor unit, adjustable, spot size variable

Transmitted light Spot

1x 50 Watt light source

White light

4x 35 Watt light source, adjustable and

2x 6 Watt FL light source

IR 740 - 1100 nm "anti-Stokes"

Wide-band large area illumination for examination of "anti-Stokes inks"

LED Ring light

Mult-angle LED ring light illumination, automatic or manual, for special holograms and kinegrams (OVD)

Backlight illumination

to be used in combination with all light sources

Segment illumination

4 independently and combinable light segments

Verification of SICPA OASIS®

security features

Polarisafe® Module

for visualisation of Polarisafe® fibres from Landqart®

Information Module

for display of illumination sources (lifetime, lamp exchange, etc.

Excitation filter module

Motorised filter selection, 83 filter combinations of low and high-pass of various wave-lengths from 380–720 nm and bandwidths from 5–340 nm (according to combination).

Camera barrier filter module

Motorised, visible IR longpass filter, values 350–1100, 350-680, 530, 550, 570, 590, 610, 630, 645, 665, 695, 715, 735, 750, 780, 830, 850, 1000 nm

Computer system:

The perfect system for image archiving, report generation and creation of training material, etc., consisting of the following min. configuration: QuadCore processor or HP workstation, FireWire (IEEE 1394a), Windows7 Pro 32/64bit, 30" TFT flat screen

Software PIA-7000:

- Image comparison: superposition, split image, complementary colours
- Image enhancement functions
- Measuring applications: length, area, angle, diameter, etc.
- Album, image management, image inserts
- Camera and Colour set-up, presetting
- Auto and EasyScan mode
- Video capture mode
- MRZ verification and detection of Invisible Personal Information (IPI and ICI) via Software
- Spectroscopy for measuring spectra in absorption, reflection, transmission and fluorescence
- Colorimetry: L*a*b* / CIE colours
- Displaying active ring light, etc.

Optional Accessories

Colour Spectroscopy Module SP-2000

Miniature fibre optics spectrometer SP-2000 with USB connection, fibre diameter 100 microns, resolution 6.4 nm, grating bandwidth 360-1100 nm, barrier filter can be used to measure luminescence spectra

Visible/IR-continuous narrow band illumination

150W Halogen lamp with a continuous interference band pass filter from 400 to 1000 nm, smallest step 1 nm, producing 61 images, typical bandwidth 40 nm

Hyper spectral Imaging Module

in conjunction with PIA-7000 Software and continuous interference band pass filter

OVI Observation Module

X/Y Translation stage

Database Passports and banknotes

Magnetic Ink Visualization with detector

RFID Chip Reader integrated or as separate device PAGScan, for reading the chip information

Dimensions 841x590x517 mm (wxdxh)

Weight 83 kg

Mains connection 220–240 V/50 Hz or 110–120 V/60 Hz



projectina
A DIVISION OF FORENSIC TECHNOLOGY

Visit www.projectina.ch for more information.