

ADF 10
ADF 50
VDF 100

Family of False Document
Analyzers to identify the
authenticity and changes in
official documents



Main specifications:

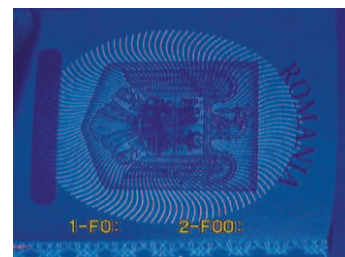
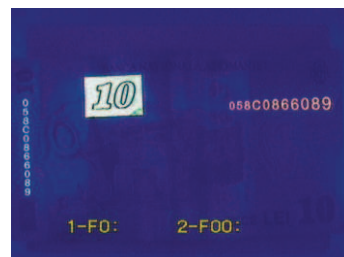
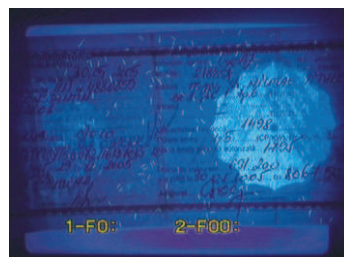
- Coaxial illumination for retro reflective examination of the security elements;
- Incident and transmitted illumination in visible and IR in different wavelength;
- Incident and transmitted illumination in UV 365 nm and UV 254 nm;
- Side illumination for embossed texts;
- Enhanced filtering;
- Extreme Zoom;
- Image comparison of live image with database images;
- Image mirroring;
- Remote operation through LAN or modem;



The family of false document analyzers
provides you with a diversified range of
equipments adapted to your needs

WE CAN help you to distinguish between false
and genuine documents, fast and easy

In a matter of a minute you can assess the
authenticity of any document



optoelectronica
excelența în cercetare - dezvoltare

S.C. Optoelectronica 2001 S.A.
409, Atomistilor St.
077125 Magurele, Ilfov County, ROMANIA

Phone: + 4021 457 44 98
Fax: + 4021 457 42 04
www.optoel.com
E-mail: tncsoiu@optoel.com

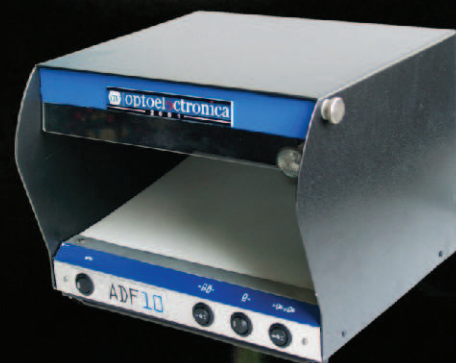
optoelectronica
excelența în cercetare - dezvoltare

Copyright © 2005
Optoelectronica-2001 S.A.
All rights reserved.

Family Of False Documents Analyzers

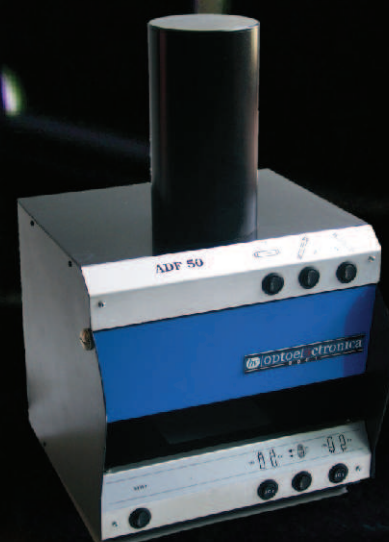
The family of false document analyzers provides you with a diversified range of equipments adapted to your needs:

ADF 10



ADF 10
High performance with minimum costs

ADF 50



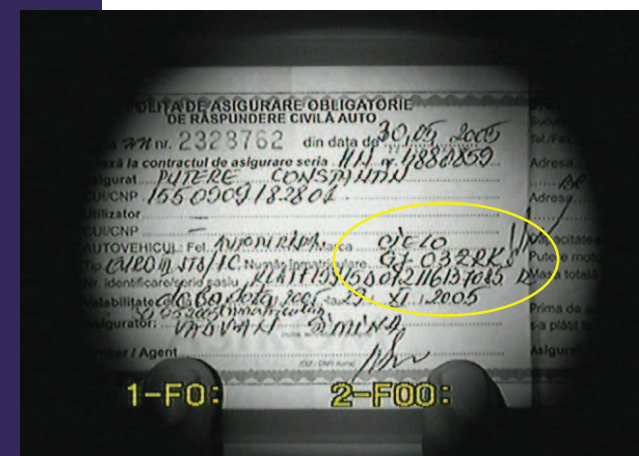
ADF 50
The ADF 50 analyzer is remarkably useful when the speed and efficiency of the checking are of first order.

VDF 100

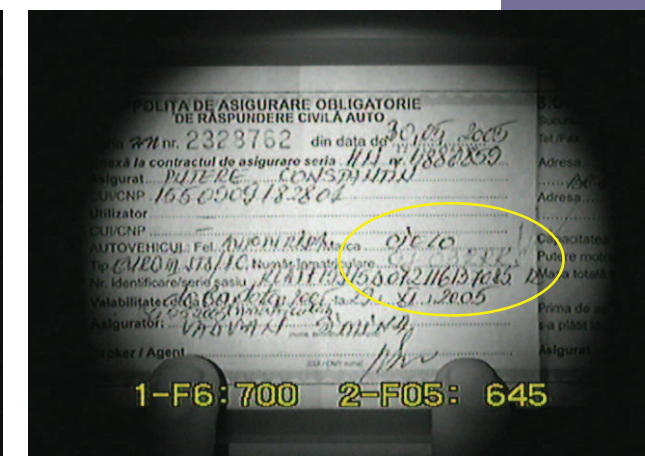


VDF 100
State of the art for document authentication.
A complex solution in a challenging domain

Selective wavelength illumination



Ink's different response to illumination at different wavelengths

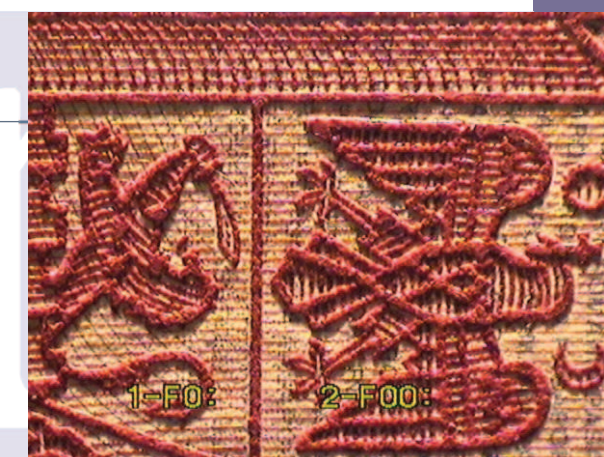
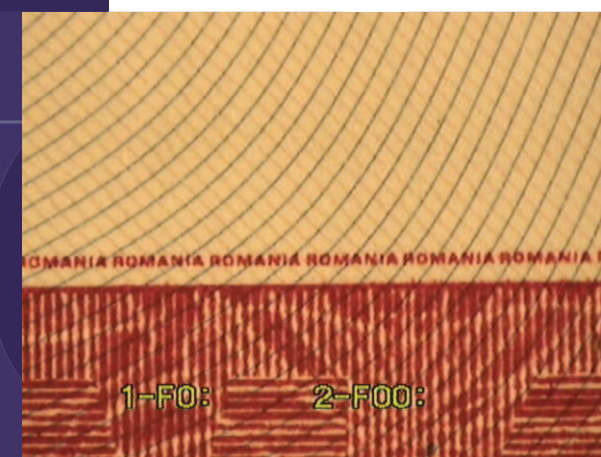


Special optical functions:

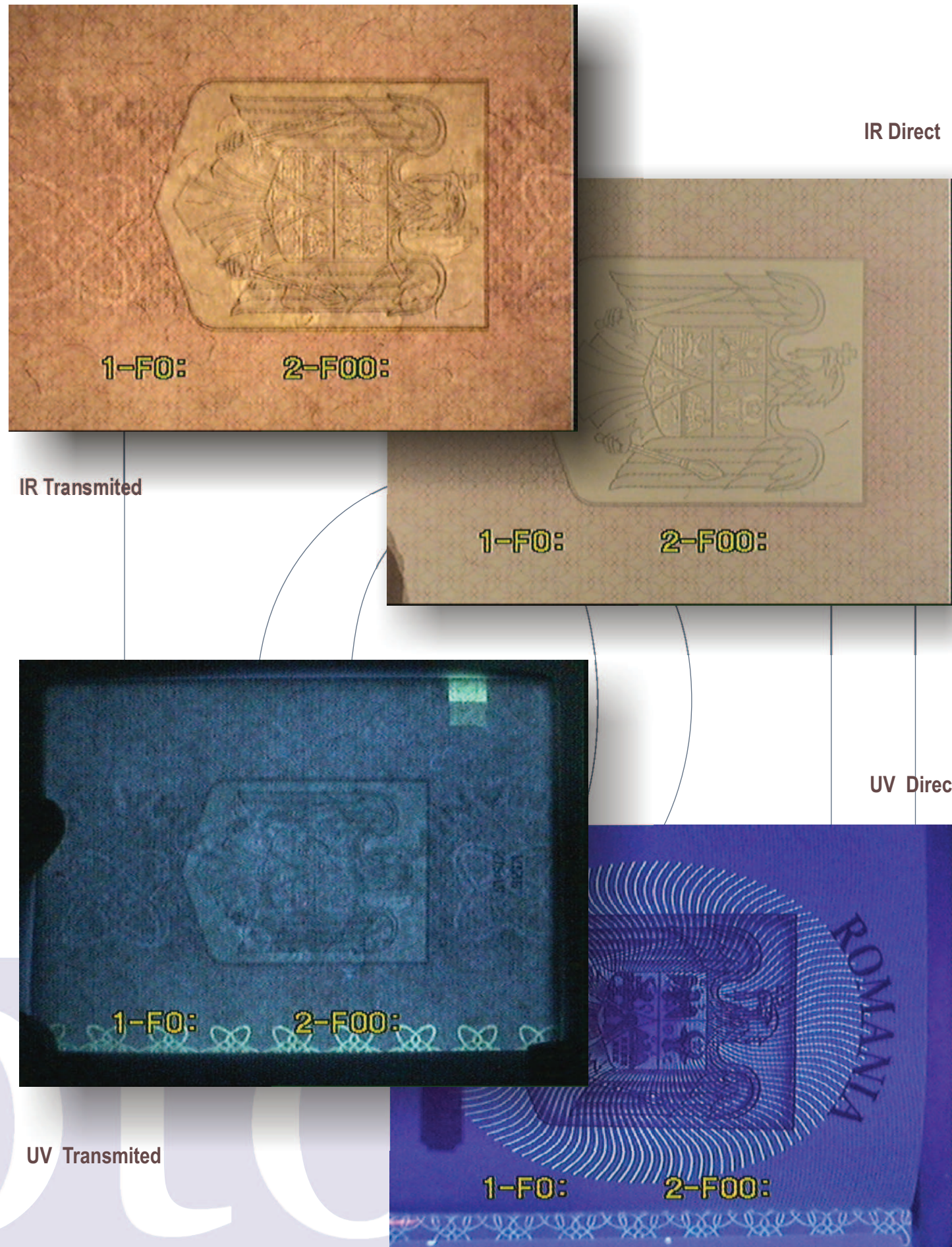
- Coaxial illumination for retro reflective examination of the security elements;
- Incident and transmitted illumination in visible and IR in different wavelengths varying from 256 nm to 1000 nm;
- Incident and transmitted illumination in UV 365 nm and UV 254 nm
- Lateral illumination for embossed texts;
- Enhanced filtering
- Zoom;
- Background color switching;
- Image comparison of live image with database images;
- Image mirroring;

Microtext

« Intaglio » effect visualisation



Types of inspections



ADF 10

The device is designed for fast authentication of a large variety of documents. It examines: watermarks, filigree, security lines, fluorescent security elements, colorants, the quality of the paper, the laminated security elements etc. An adjustable window will protect the human eye from ultraviolet radiation while allowing the document to be easily examined. The illumination with different light sources allows the detection of any physical or chemical damage or modification to the documents.

ADF 50

The device is designed for visual examination and digital processing of the document's images, by displaying the absorption, reflection and fluorescence variations of the pigments (coloring agents), in different spectral bands, in incident transmitted and parallel light. It is robust, resistant to mechanic solicitations. It is light, of reduced dimensions, easy to handle. The maximal accuracy of the document analysis makes it efficient and its affordable cost (compared to similar equipment) makes it attractive.

VDF 100

VDF-100 is a videocomparator, able to identify the authenticity and modified items in official documents. It has double command from the device itself and through the software. The image of the analyzed document is displayed on a LCD screen and printed to a high resolution printer.

The result can be accessible through network and can be stored in a specialized database.

Working wavelengths: 254 nm to 1000 nm

Family Of False Documents Analyzers

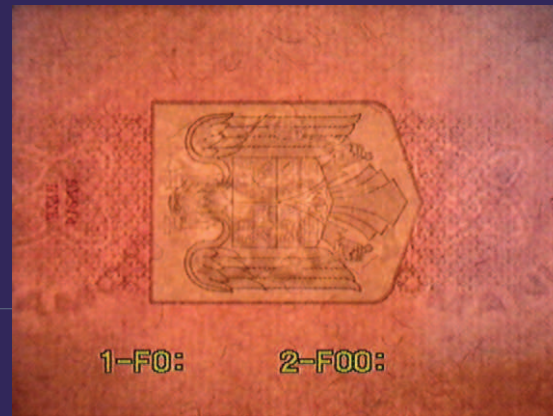
Can be used in Customs offices on the border or at the passport offices

- In consulates
- In bank office
- Police departments- in forensic investigations
- Any office working with high value documents or original/ official documents which must be authenticated

IR direct



IR transmited



You can see the difference:

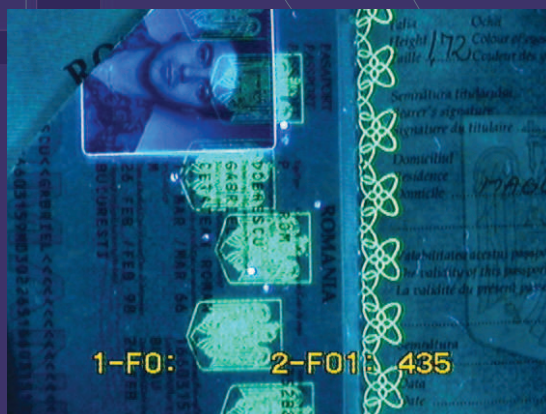
A complete integrated hardware and software solution for document's authentication !

Competitive quality at affordable price!

It can be controlled from distance (network integrated): a specialist from headquarters can investigate a document miles away.

It all fits together to help you see the truth - to know !

UV direct 365 nm



UV transmited 365 nm



➤ The images can be exported out from computer in the bmp. format with all information received from image;

➤ Possibility to remote operation by LAN network;

➤ Possibility to make an extraction of live images in order to realize theirs comparison with stored images;

➤ Images can be printed from display ;

➤ Alternative displaying of live image and stored image, with displaying with timer STROBE adjustable;

The equipment can be operated from the hardware commands situated on the front panel or from the software command panel on the display

It is using a turret engine drive, position transducers for controlled moving.
"Broadband" filter in interference technology with wavelengths : 400-480, 440-540, 440-580, 480-620, 530-660, 580-700, 630-740, 650-750nm, total pcs. 8.
Filters value is displayed on the screen;

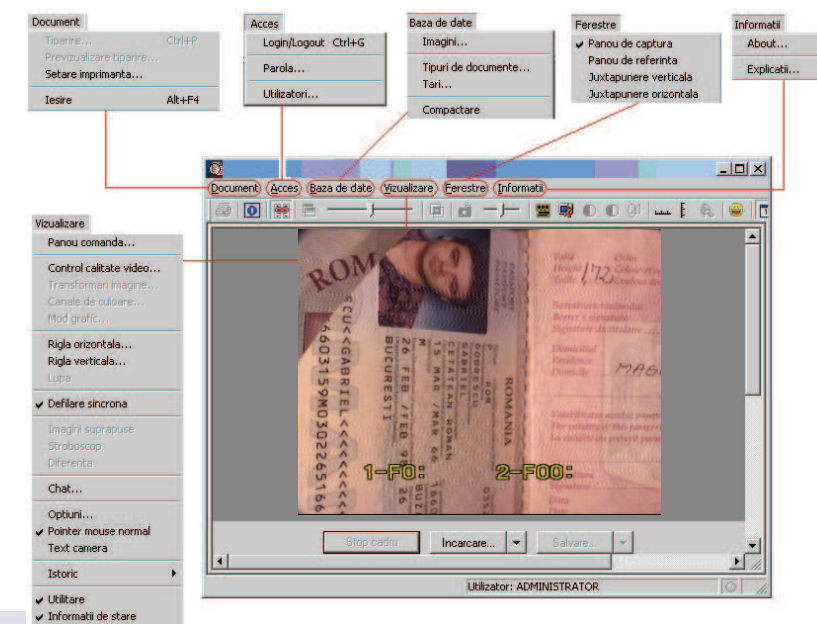
Easy to use, intuitive menus:

User Secured authentication

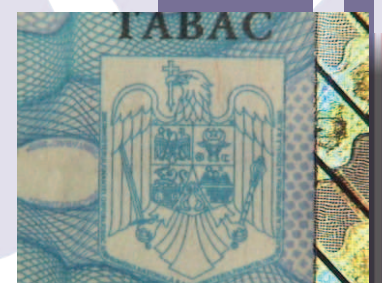
Dedicated database for images, documents, users, countries of origin

Multiple windows working environment

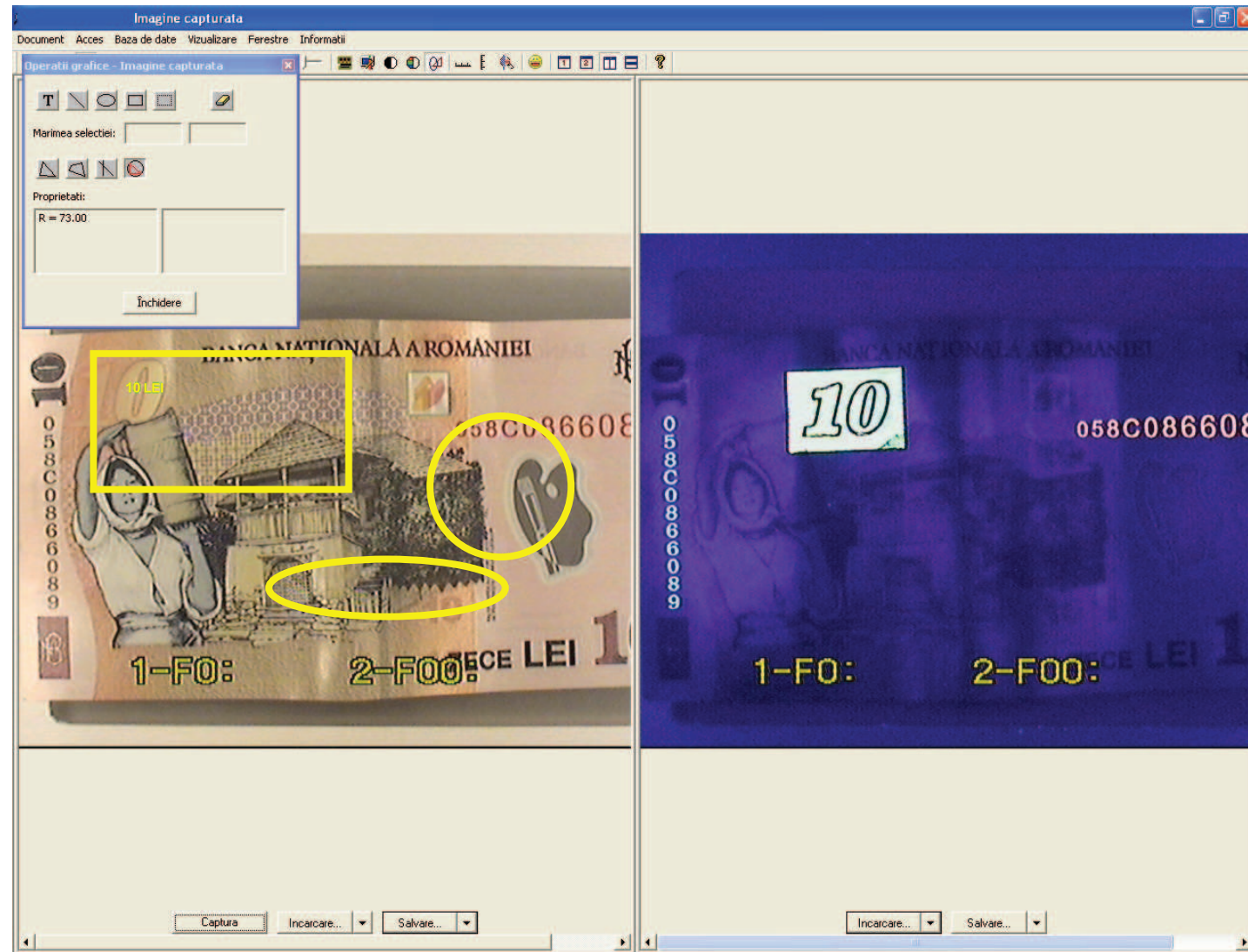
Integrated help files, on-line support



Zoom x25



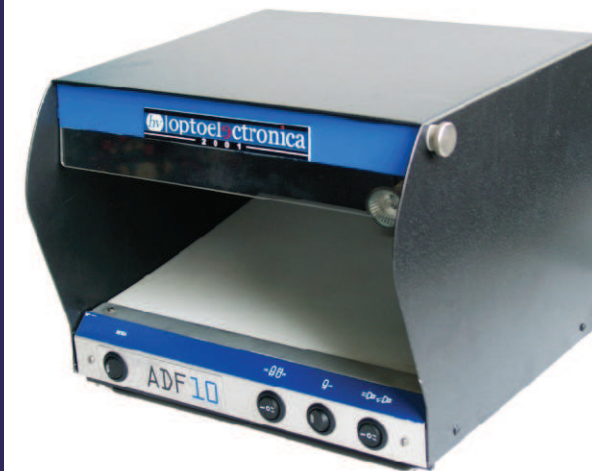
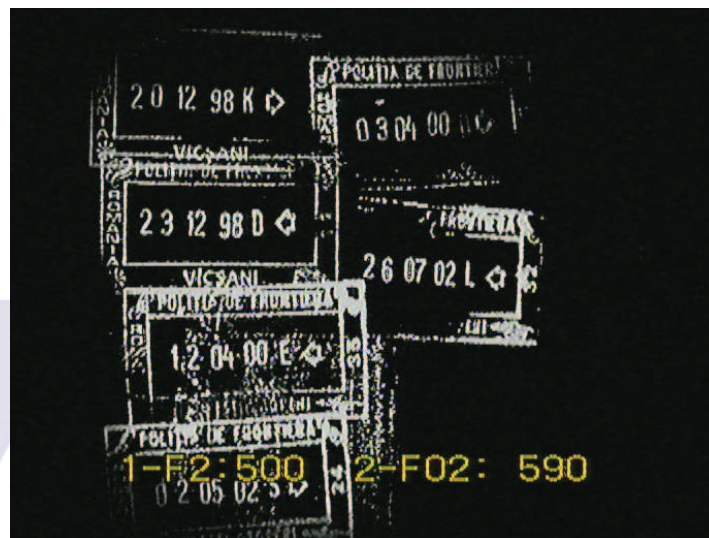
Adnotations & Measurement



Operations with VDF 100:

- You can zoom the image. Adjust the contrast, brightness, sharpness on "freeze" images, live images or stored images
- Special filters to diminish the noise over the image;
- Changing the background color of the images from white in black and reverse:
- You can compare two images by splitting the screen or by superimposing two images.
- Measurement on image:
 - measurement of the distance between two points
 - measurement of lines length
 - measurement of surface specified by user
 - measurement of angles between two lines
 - measurement of angles defined of 3 points into the circle.
- The measurements and different comments can be annotated on the image and stored in special folders

Fluorescent Spotlight IR



ADF 10

Dimensions: 300 x 250 x 220 mm
Weight: 4500 g
Power supply : 220 V/50 Hz
Functions :

- » Magnifier 10x
- » It examines: watermarks, filigree, security lines, fluorescent security elements, pigments, the quality of the paper, the laminated security elements etc.
- » It is ergonomic, resistant to mechanical shocks and analyzes fast any types of documents (in several minutes);
- » It is portable, light, small dimensions, user friendly;
- » Documents are examined with high sensitivity and efficiency; it is cheaper than other devices;
- » The utility of AFD 10 analyzer is remarked there where speed and efficiency are essential;
- » The device contains all the light sources it needs for analyzing the security features of a wide range of documents.



ADF 50

Dimensions: 300 x 290 x 500 mm (for lightening system)
Weight: 7800 g
Power supply : 220V/50 Hz
Functions :

- » UV incident: 20 W, = 365 nm
- » Transmitted UV: 10 W, =365 nm
- » Incident fluorescent light: 10 W
- » Transmitted fluorescent light: 10 W
- » IR incident, filament: 2x20 W
- » Transmitted IR, incandescent lamp: 1 x 20 W
- » Tangential light, incandescent lamp: 20 W
- » Oblique left and right IR incandescent lamp: 2x20W
- » Side incandescent lamp: 1 x 20W
- » Measurement of the distance between two points
- » Measurement of lines length
- » Measurement of surface specified by user
- » Measurement of angles between two lines
- » Measurement of angles defined of 3 points into the circle.
- » Dual CCD camera, color/monochromic, sensibility up to 1000 nm, manual and automatic control of the motorized zoom and focusing



VDF 100

Technical specifications:

- Camera CCD, dual color/monochrome, sensitive to 1000nm, with automatic and manual control of the zoom, iris and focus
- Motorized zoom lens x25 optic and x4 digital which can realize a magnification up to 100
- Module for light, camera and filter manage the functions of apparatus: light, camera command, zoom command, turret filter commands, ensure the communication with the computer
- Resolution:
 - for minimum magnification: 1,4 lp/mm
 - for maximum magnification: 32 lp/mm
- Field of view:
 - for minimum magnification: 120 x 90 mm
 - for maximum magnification: 5 x 4 mm
- Cut filter:
 - 12 filters longpass with wavelength range: 435, 590, 610, 630, 645, 665, 695, 715, 735, 780, 850, 1000 nm
- Interference filter:
 - 7 broadband interference filters in frequency wavelength range: 400 ... 1000 nm
- Dimensions: 410 x 380 x 380 mm

Facilities:

- Co-axial lighting for retro-reflexive examining security features;
- Incident and transmitted visible/ir lighting for examining masked writing, watermarks and displaying the differences in absorption and reflectance of pigments inks on different spectral bands, from 254 nm to 1000 nm;
- Incident and transmitted uv 365nm lighting for examining special security features;
- Side lighting for examining indentations and embossed features;
- Incident uv 254nm lighting for examining special security features;
- Optimal filters command in order to reduce the masking effects of background luminescence;
- Zoom possibility;
- Possibility to replace the background color of images, white background with black background and vice versa;
- Possibility to do subtraction of live images in order to make comparison with stored images;
- Mirror reversal of images;

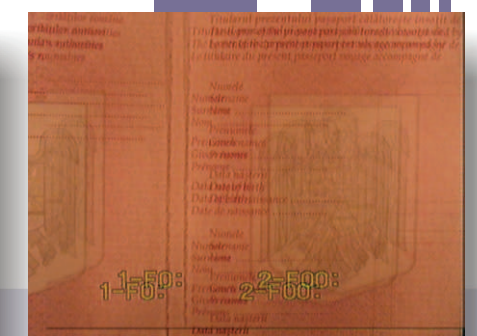
Side illumination



Overlap with negative



Compare



Working modes:

- Server workstation
- Client workstation
- Chat : easy communication between server and workstations at different geographical locations