



# CS-1

## Document Reader & Forensic System [All-In-one]

## CS-1 Document Reader & Forensic System (All-In-One)

The CS-1 is an All-in-One document reader and forensic system consisting the latest technology of eDocument reader (VDR-1) with a TouchScreen PC and a Multi-spectral Magnification system for forensic verification.

The VDR-1 eDocument reader is a ICAO complying reader for Passports (2 OCR-B lines) and ID cards (3 OCR-B lines) as well as for ID documents with a contact chip. Reading White light, UV and IR, optional also with coaxial light. Reading of MRZ in < 4 sec and Chip reading in < 1 seconds.

Software is located on the TouchScreen PC, serving for purposes of Document Reading and Document Forensic Analyse.

Multi-spectral magnification system is a spectrum analysis instrument, delivering all frequencies of light necessary for complete analysis:

- Ultraviolet in two frequencies
- Visual light in seven colors
- Infra Red in two frequencies
- Plus IR directional tangential light
- Non-illuminated mode for transparency analysis

The All in One solution is a compact unit best suitable for Border control as well as for Gate Control on Airplain boarding.



**VDR-1 White Light Screenshot (Kinegram and OVI is visible)**



**Reading of Microtext in reflection mode under different light sources, enlargement 30x**



**Reading in transparent mode on the flat light tablet in enlargement 30x**



## Technical data

<b>eDocument Reader</b>	
Document type	All ICAO conform Passports, ID Cards, Visas and other documents with Security Features
Color scan	24 Bit RGB
Illumination	<ul style="list-style-type: none"><li>• Ultra Violet Light Scan</li><li>• Infrared Light Scan</li><li>• White Light Scan</li></ul>
ICAO Barode reading	<ul style="list-style-type: none"><li>• 1D Barcode OCR-B Reading</li><li>• 2D Barcode PDF417 Reading</li></ul>
Hologram reading [on request]	Hologram, Kinegram® and Multigram® Reading
RFID reading	Contactless Chip Reading from Passports, ID Cards, etc.
Scan area	150 x 88 mm
Image resolution	400 dpi
Image quality	24 Bit RGB
Image output	color and grey binary
Image size:	2048 x 1536 px
Image format	bmp, jpg, tiff
Interface	100Base-T, USB2, RS232

Hardware prerequisites	X86-32/X86-64 processor, 1GHz, 512 MB RAM, 40 GB HD, PCIe slots, 100Base-T, USB2
OS prerequisites	Linux, MS Windows 2000, MS Windows XP
Temperature Operation	+ 5 °C - + 40 °C
Temperature Storage	- 20 °C - +55 °C
Relative Humidity Operation	at 25 °C - 80 % RH (not condensed)
Relative Humidity Storage	at 25 °C - 90 % RH (not condensed)
Dimension	287 x 255 x 245 mm (L x W x H)
Weight	4,5 kg net
Electric Specification	110 V-240 V, 50-60 Hz

<b>Forensic System</b>	
Document Type	All ICAO conform and non-ICAO conform Passports, ID Cards, Landing Cards, and other documents with Security Features
Enlargement	30 x
Video Output	Video composite signal CCIR 50 Hz., 380 TV lines, 1 Vpp., 75 Ohms NTSC
Color Scan	White, red 615 nm.; yellow 575 nm.; green 528 nm.; cyan 510 nm.; blue 470 nm. magenta 410 nm
UV Scan	375 nm
IR Scan	880 nm and 760 nm
Hologram Reading	Hologram, Kinegram® and Multigram® Reading



Resolution	510 x 492 pixels
Image output	color and gray analog
Interface	Video to USB2

Hardware prerequisites	USB2 port
Software prerequisites	MS Windows 2000, MS Windows XP
Temperature Operation	- 23 °C to +50 °C (-10 °F to +122 °F)
Temperature Storage	- 20 °C to +55 °C (-30 °F to +158 °F)
Relative Humidity Operation	0% to 90% (from 0°C to 35°C or from 32°F to 95°F) RH (not condensed)
Relative Humidity Storage	0% to 70% (from 35°C to 50°C or from 95°F to 122°F) RH (not condensed)
Dimension	Width 70 mm., Length 130 mm., Height 50 mm
Weight	110 grams net,
Power requirements	25 Watt at 12 Volts DC
Electical values	Universal power adaptor: Input voltage: 100-240 VAC, 50/60Hz; Output 12 Volt DC./ 900 mA.

**CE Marking**

Low Voltage Directive 73/23/EEC	EN60950
EMC Directive 89/336/EEC	EN55022 Class B
	EN55024
	EN61100-3-2
	EN61100-3-3