# **DERMALOG**

## All-in-One Scanner VF1

for fingerprints, ePassports, ID Cards, signatures, flight tickets, barcodes, photos etc.















### **Key Benefits**

The DERMALOG VF1 is the world's first scanner for biometrics and documents. BOTH fingerprints and documents can be scanned now using one single device.

The VF1 is ideal for intergration into eGates, kiosks and mobile units. One single device can now capture fingerprints, passports, flight tickets, signatures etc.

# The VF1 for Fingerprints and Documents.

## The world's first combined scanner for fingerprints and documents.

The DERMALOG'S VF1 is the world's first multipurpose scanner for fingerprints and ePassports capturing both using the same device. DERMALOGS latest sensor technology results in one single device for both. For the first time all capabilities of an optical tenprint scanner (4-4-2 scanner) and a full color passport scanner (with RFID) are fully integrated. To make this device even more versatile the VF1 is able to capture barcodes, flight tickets and signatures on the same scanning area.



#### ingerprints

The VF1 includes all features of a ten fingerprint scanner/ 4-4-2 scanner including FBI Appendix F certification. It provides best fingerprint quality, also for moist and dry fingers and is known for highest capturing speed.



#### **Rolled Fingerprints**

The VF1 also provides the functions to capture rolled fingerprints for further investigation as well as for criminal registration.



#### Liveness Detection

The VF1 detects plastic fingers or fake fingerprints immediately. Outstanding performance in liveness detection makes the VF1 the most secure fingerprint scanner on the market today.

## Fingerprint Scan Features

- > Fingerprint scan (4-4-2) for plain tenprints, fourprints and twoprints
- > Capturing rolled fingerprints
- > Fingerprint Liveness Detection for each finger
- > Moist and dry finger optimization
- > Fingerprint segmentation
- > Left/Right-Hand Detection
- > Latent fingerprints scan
- > NIST quality analysis
- > FBI Appendix F Certification
- > Fingerprintscan resolution: 500 dpi





#### Fingerprint Segmentation

The VF1 automatically detects fingerprints and markes them, including NIST 1 and NIST 2 quality. Additionally the liveness is displayed for each fingerprint. A segmentation function stores the rotated fingerprints.



#### Left-Right-Detection

DERMALOG VF1 fingerprint features automatically detect if the fingers are from the right hand or from the left hand. This makes the VF1 very easy to use.



#### Signatures

By using a touch pen, signatures can be captured on the DERMALOG VF1. This function replaces an extra signature pad.

# The VF1 for Fingerprints and Documents.

# The scanner for ePassports, ID Cards, signatures, flight tickets, money, photos and numerous documents of your choice.

The DERMALOG VF1 is the perfect solution for national registration, automated border control, passenger management and commercial purposes within the banking sector. It is easy to integrate into existing solutions and self-explanatory to every user.



#### ePassports

The VF1 is a full high resolution color passport scanner, including ultraviolett (UV) and infrared (IR) images, plus image checks. Passport data stored on the chip can be read by integrated RFID Reader.



#### ID Cards

ID Cards can be scanned in color, including reading of contactless chip cards through the RFID reader of the VF1.



#### Barcode Reader

The VF1 scanner scans barcodes or 2-D-barcodes from flight tickets, ID Cards or from other documents.



- > Passport and ePassports scan
- > ID Cards and eID cards scan
- > RFID scan
- > Bar code scan e.g. Flight tickets
- > Arrival/Departure cards scan
- > Photo scan
- > Money scan
- > Cheques scan
- > Auto rotation of documents and images
- > Automatic check for faked documents
- > Document scan resolution: 250 and 400 dpi





#### Photo Scan

The VF1 can also scan photographs and other small documents and automatically rotates them into the correct perspective.



#### Banknotes/Cheques

Due to the integrated UV and infrared light sources, DERMALOG's VF1 visualizes and verifies security features built into banknotes and cheques.



#### Documents

The authenticity of any high security document can easily be verified through the UV and IR features of the VF1.



# DERMALOG VF1in a Mobile Case.

## The world's first combined scanner – now packed into a handy case.

#### Verification (1:1) and identification (1:N) when and wherever needed.

DERMALOGs mobile authentication solution is available in an easy-to-handle case that meets highest demands. The VF1 is robust and stable while operating extremely reliably - wherever it is meant to get the job done. Operating from a temporary office is a task frequently faced in regions where infrastructure remains less developed. Voters registration, banking business, temporary immigration departments or mobile citizens' offices are common facilities. The use of biometric methods while being on the road is an essential characteristic regarding the boxed DERMALOG VF1 solution.

#### Specifications All-in-One Scanner VF1

Fingerprint	
Fingerprint scanning window size	126 mm x 89 mm
Optical scanning area	82 mm x 77 mm
Image resolution	1600 x 1500 pixels, 500 dpi
Capturing	tenprint scanner/ 4-4-2 scanner for plain and rolled fingerprints, signature and documents
Bit Depth	8 bit, 256 gray levels
Raw fingerprint image file size	Approx. 2.4 MB
WSQ compressed	Approx. 0.4 MB
Interface	USB 2.0 hi-speed, integrated 2-port USB hub
Dimensions (H x W x D)	184 mm x 185 mm x 291 mm
Weight (including USB cable)	3.5 kg
Operating temperature	0°C to 50°C at a humidity of 5 - 90 % non-condensing
Storage temperature	-20°C to 60°C at a humidity of 5 - 90 % non-condensing
Light source	Infrared light-emitting diode (LED) + VIS + UV
Supply	external AC adapter with 1.8m cable, 100-240V, 50/60Hz, 1.6A
Passport	
Scanning area	126 mm x 89 mm
Optical resolution	high resolution color camera with 400 dpi / 250 dpi
Lighting	full color passport scan, Infrared (IR), ultraviolet (UV)
RFID Reader	RFID reader for both pages of a passport / 4 SAM Card slots
SDK Features	
NIST Quality Check	NFIQ 1.0: calculation of the NIST quality from a given image. The quality is calculated in the NRQ range from 1 (good quality) to 5 (bad quality) using the official NIST standard
	NFIQ 2.0: calculation of the NIST quality from a given image. The quality is calculated in the NRQ range from 100 (good quality) to 0 (bad quality) using the official NIST standard
WSQ Compression	FBI-certified
Operating Systems	Windows, Linux

Specifications may be subject to change due to ongoing technical innovations.

#### Specifications All-in-One Scanner VF1 with Mobile Case

#### Flight Case

Dimensions (H x W x D)	400 mm x 280 mm x 260 mm
Weight	11.5 kg
Power supply	100 - 240V, 50/ 60Hz, 2.8A, C13 female connector accessible from the outside
Tablet	
Model	Acer Switch Alpha 12
Display	12" IPS-Display
Dimensions	2160 x 1440 Pixel
Processor	Intel Core i5-6200U, 2x 2.30GHz, 4GB RAM
Disk	128 GB SSD
Software	Software Windows 10
Cameras	2.0 megapixel

Specifications may be subject to change due to ongoing technical innovations.

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