

# DERMALOG

## Fingerprint Scanner ZF10

Best-value fingerprint identification



### Outstanding Features

- > Space saving dimensions of 6-inch footprint
- > Liveness detection to prevent attacks using fake fingers
- > Automatic fingerprint segmentation

### Key Benefit

The best-value plain tenprint, single print and rolled fingerprint scanner.

# DERMALOG ZF10 – Unchallenged Image Quality – Way Ahead of its Time

## The reliable solution for a large scale fingerprint identification system

The ZF10 is suitable for use in various environments and applications including border control, electronic ID and passport issuing as well as voter registration and verification. Moreover it can be used for security documents, such as visa. A large scanning window assures that images are easy to process. Latest optics guarantee the best possible image quality for plain tenprints and single prints as well as for rolled fingerprints.



### Fingerprints

The optical scanner provides a 500 dpi fingerprint image (FBI EBTS Appendix F certification). Due to the automated fingerprint optimization results are fully applicable even in poor conditions (in case of both wet and dry fingerprints)

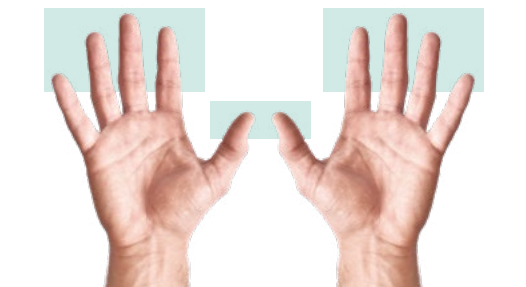


### Rolled Fingerprints

Rolled fingerprints do not set a difficult challenge for the Fingerprint Scanner ZF10. The captured single pictures are converted into image data which can be readily used for professional demands. Marked areas show the optimal spots for capturing rolled fingerprints

## Product Features

- > Excellent quality for both moist and dry fingerprints
- > Robust against interfering light sources
- > High quality fingerprint images – no reference images required
- > Liveness detection to prevent attacks using fake fingers
- > Automatic fingerprint segmentation
- > Capturing of plain tenprints and singleprints as well as rolled fingerprints
- > Dimensions of 152 mm x 152 mm x 146 mm



### Ten Fingerprint Capturing

The ZF10 provides a feature of collecting an individual's ten fingerprints by using the 4-4-2 method. Ensuring crystal clear images, the device delivers excellent data quality for further processing. ZF10 also automatically detects hands (left/right) and thumbs.



### Liveness Detection

High security will be ensured by using the latest liveness detection technology. Exclusive security features detect fake fingerprints or manipulation. (Optional purchase)

# Specifications Fingerprint Scanner ZF10

Technical Features	
Fingerprint Scanning Window Size	89 mm × 85 mm (3.5" × 3.3")
Optical Scanning Area	81 mm × 76 mm (3.2" × 3.0")
Image Resolution	1600 px × 1500 px, 500 dpi
Image Evaluation Frame Rate	>3 frames/sec; continous image capture
Image Quality	ISO 19794-4, ISO 19794-2
Capturing	Tenprint scanner / 4-4-2 scanner for plain and rolled fingerprints
Bit Depth	8 bit, 256 gray levels
Raw Fingerprint Image File Size	Approx. 2.4 MB
WSQ	Approx. 0.4 MB (1:15 compression)
Interface	USB type A 2.0 high-speed with 1.8 meters standard USB type A cable
Encryption	Support for encryption using factory loaded unique digital certificates
Dimensions	152 mm × 152 mm × 146 mm (6.0" × 6.0" × 5.7")
Weight	2.2 kg/4.8 lbs (including USB cable)
Operating Temperature	0 °C to 50 °C (32 °F to 122 °F) at a humidity of 0 % to 90 % non-condensing
Storage Temperature	0 °C to 50 °C (32 °F to 122 °F) at a humidity of 0 % to 90 % non-condensing
Light Source	Orange
Power Supply	5 V DC (+/- 0.25 V), 400 mA (powered via USB type A cable)
Certificates	CE, FBI Appendix F, ISO/IEC 19794-4:2011
SDK Features	
Fourprint Segmentation	Separation of single fingerprint segments from a fourprint (CAPI and .NET) image
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	Microsoft Windows, Linux