DERMALOG

Fingerprint Scanner LF 1 Biometric identification for a mobile age.





Outstanding Features

- > Excellent quality for both wet and dry fingerprints
- > Very small dimensions and a weight of only 14 g

Key Benefits

The LF1 is one of the world's smallest optical fingerprint scanner with dimensions of only 29.4 mm x 43.4 mm x 13.7 mm.

DERMALOG LF1 – Outstanding Biometric Technology in a Compact Design.

One of the world's smallest fingerprint scanners – space saving and lightweight. Fast, accurate and easy to integrate.

Its uniquely compact size and outstanding technical characteristics make the DERMALOG LF1 extremely versatile. Whether for mobile or stationary biometric identification – the LF1 opens the door to numerous fields of application: access control, time tracking, POS terminals, ID cards, ATMs, printers, safes, door locks or portable devices.



Fingerprints

The optical scanner provides a 500 dpi fingerprint image (PIV certified). The automated fingerprint optimization enhances the result even in case of poor conditions (wet and dry fingerprints).



Liveness Detection

Highest security will be ensured by using the latest liveness detection technology. Exclusive security features detect fake fingerprints or manipulation.

Product Features

- > Excellent quality for both wet and dry fingerprints
- > Robust against disturbing light sources
- > Small dimensions of only 29.4 mm x 43.4 mm x 13.7 mm
- > Flexible and easy integration as OEM devices
- > Weight only 14 g
- > No initialization required for fast capturing
- > High quality fingerprint images no reference images required



OEM Device

DERMALOG'S LF1 design offers all benefits of flexible and easy integration into OEM equipment. It enables a wide range of applications while delivering images of the highest quality.



Embedded Board

The LF1 can optionally be supplemented with the embedded board. This ensures support for fingerprint scanning with DERMALOG fingerprint scanners even on low performance platforms such as POS devices. The embedded board provides the necessary computing power for fingerprint capturing, coding and matching for the cost of a little increment in power consumption.



Specifications Fingerprint Scanner LF1

Technical Features

| Fingerprint scanning window size | 18 mm × 17 mm |
|---|--|
| Optical scanning area | 17 mm × 13 mm |
| Image resolution | 332 × 256 pixels, 500 dpi |
| Bit Depth | 8 bit, 256 gray levels |
| Raw fingerprint image file size WSQ compressed | Approx. 85 kByte Approx. 10 kByte |
| Interface | USB 2.0 high-speed, with wire-to-board or FFC connector options |
| Dimensions (H \times W \times D) | 43.4 mm × 29.4 mm × 13.7 mm |
| Weight | 14 g |
| Operating temperature | 0°C to +40 $^\circ\text{C}$ (32 $^\circ\text{F}$ to 104 $^\circ\text{F}$) at a humidity of 10 $\%$ to 90 $\%$ non condensing |
| Storage temperature | -20°C to +70°C (-4°F to158°F) at a humidity of 5% to 95% non condensing |
| Light source | Infrared light-emitting diode (LED) + green |
| Supply | DC 4.75 - 5.25 V (USB-powered) |
| Current consumption (operating) | 230 mA typ./300 mA max. |
| Current consumption (standby) | 1 mA max. |
| Ingress protection | IP54 (top side) |
| Certificatios | CE, FBI-PIV |
| 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, Android |

Head Office DERMALOG Identification Systems GmbH Mittelweg 120 20148 Hamburg Germany

Malaysia Office DERMALOG AFIS Asia Sdn Bhd 8-4, 8th Floor, Bangunan Malaysia RE No. 17, Lorong Dungun Damansara Heights 50490 Kuala Lumpur Berlin Office DERMALOG Identification Systems GmbH Kronenstraße 1 10117 Berlin Germany

Philippines Branch Office DERMALOG Identification Systems GmbH 7/F Unit B 8 Rockwell Hidalgo Drive, Rockwell Center Makati City 1210 Philippines Dubai Office DERMALOG FZE Business Center, Al Shmookh Building UAQ Free Trade Zone Umm All Quwain, U.A.E.

Singapore Office DERMALOG Singapore Technical Services Pte. Ltd. Southbank 883 North Bridge Road, #17-02 198785 Singapore





© **2020** All content and images are owned by DERMALOG Identification Systems GmbH and are actively protected by copyright.