

# TOUCHLESS FOUR FINGERPRINT SENSING UNIT ACCESS CONTROL, BORDER CONTROL, SECURE AUTHENTICATION

Power plant operators, governmental entities and businesses benefits from the myriad of developments of cyber technologies – whether it is the access-control to critical infrastructures, governmental applications for driver's licenses and health services, or business identification tools like ATM and e-commerce solutions. All these terrains require easy to handle and highly secure identification and verification solutions. Today, fingerprint scanning has become a reliable form of biometric authentication for the mentioned fields. The sensing unit offers the development of new biometric identification and verification solutions.

## **TECHNOLOGY**

Touchless fingerprint recognition systems have several advantages since, they do not require contact of the fingers with any acquisition surface and thus provide an increased level of hygiene, usability, and user acceptability of fingerprint-based biometric technologies.

The real-time capture process consists of the following steps: Acquisition of high resolution finger images and computation of contact-equivalent fingerprints. Finally, the determined fingerprints can be used for authentication.

## **HIGHLIGHTS**

- Simultaneous acquisition of 4 fingerprints in less than one second
- Contactless: High user convenience
- Mitigates hygiene concerns
- Small form factor (60mm x 60mm x 50mm)
- NFIQ2 (NIST) quality assessment
- Copes with wet and dry fingers
- Interoperability with arbitrary fingerprint recognition software
- Fully compatible with contact-based fingerprints
- High accuracy
- Robust against external illumination

# TOUCHLESS FINGERPRINT SENSING UNIT

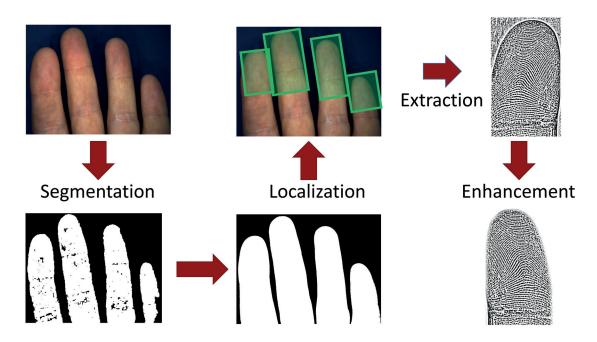


Figure: Processing of finger images consists among others of segmentation, localization and enhancement

# **TECHNICAL SPECIFICATION**

Capturing	4 fingerprints simultaneously
Capture time	<1 sec,
Output	ISO/IEC 19794-4 Fingerprint Image Data Standard
Dimensions (LxWxH)	60 x 60 x 50 mm
Capture distance	150mm
Power	12V/ 1A for LED's DC
Interface	USB 3.0, ISB 2.0
Sensor	6 MP
Operating system	Ubuntu 16.04 LTS

# TAKE A LOOK AT

- OUR TOUCHLESS FINGERPRINT VIDEO
- OUR PORTFOLIO OF SOLUTIONS

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