

Software Development Kit - 3D Facial Biometry for OEMs

Premier Face SDK v4.6

PRODUCTION
RELEASE

IN SHORT ...

Premier Face SDK is a software toolkit that enables 3D facial biometry on any devices/hardware equipped with a 3D camera. Premier Face SDK supports many use cases that manage or validate payment transactions, door entrances, logical accesses, in-cabin driver verification, qualified electronic signature, healthcare card holder verification in all verticals and industries.

PROS

- **Easy & Simple**

No passwords, no pin-codes, no OTPs : just look at the 3D camera to get verified.

- **Swiss-Grade Security**

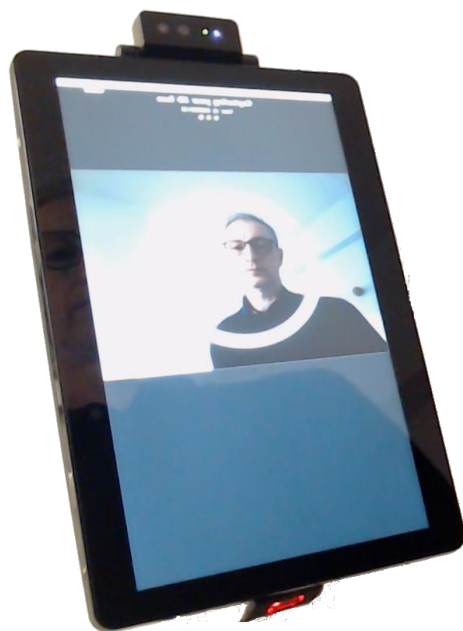
Premier Face SDK is totally resilient to picture, video and 3D silicon mask presentation attacks.

- **Strictest Data Privacy Laws**

Compliant by -design with GDPR, CNIL and CCPA

- **Transversality**

No scalability boundaries, support nearly any HW and legacy IT systems



Premier Face SDK is a software development kit that enables 3D facial biometry on modern hardware platforms. The toolkit has been designed for software/hardware integrators to bring primary a secondary strong authentication factor. Premier Face SDK works autonomously and does not require any server or centralized database. It is compliant by-design with the strictest data privacy and data protection laws & regulations, including GDPR in Europe, CNIL in France and CCPA (USA).

Premier Face SDK supports nearly any lighting conditions, including total darkness, is ethnical group agnostic and cannot be spoofed by using a picture, video or silicon 3D mask.

Premier Face SDK is available on Windows 10/IoT, Linux or Android platforms (iOS on our roadmap) and only requires an external or built-in 3D camera equipped with your laptop, tablet, kiosk, POS, payment terminal or embedded system.

Why Premier Face SDK ?

Malicious acts, sabotage, industrial espionage and cyberattacks have become almost daily for businesses and consumers, and the phenomenon is only growing. By 2025, cyber experts foresee the total cost of cyberfrauds - particularly identity theft - to exceed USD 10'000 billion per year.

Solutions exist like 2 factors (2-FA) but remain easily hackable such as HOTP or TOTP solutions where "SIM card swapping" attacks are becoming common. The solution is to use a strong, active biometry factor - 3D facial biometry - which to date offers the best compromise between user experience, level of security and price.

Premier Face SDK responds to the growing demand from integrators, distributors and IAM providers to use a single 3D facial biometry toolkit on Windows, Linux, MAC OS, Android and iOS platforms that allows them to unify their product line while totally controlling the licensing model, legal responsibility, data protection and data for privacy laws, in accordance with national or continental laws or regulations, including GDPR, CNIL, CCPA, PSD2 or EIDAS.

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Hardware & Pre-Requisites

Smartphone, tablet, laptop, POS, payment terminal or embedded system
CPU
No bionic/CNN chipset required
RAM
Support various 3D camera (SL, ToF)
Built-in 3D camera support
External 3D camera support
Windows 10/Windows IoT
Linux
Android 9 (or higher)
iOS

-
- Octa-Core processor - Intel i5 or Cortex A76 recommended
-
- 4+ Gb (depends on your OS)
- (ask us)
-
- (USB or MIPI)
-
- (see 3D camera driver)
- (see 3D camera driver)
- Roadmap

Facial Biometry

Modality
Single or continuous authentication
Passive authentication
Agnostic to lighting conditions
Zero biased biometry
Zero biometry database
Zero biometry server/cloud service
Biometric template
Support of multiple templates per individual
Type of template
Biometric template update support
Photo/Video Presentation Attack Detector
100% resilient to picture attacks
100% resilient to video attacks
100% resilient to paper mask attacks
100% resilient to 3D silicon mask attacks
Context-sensitive accuracy programmable
False Acceptance Rate (FAR)
False Rejection Rate (FRR)

- Authentication (1-to-1 verification)
-
- Roadmap 2022 - version 5.x
- (sensor must not be exposed to direct sunlight)
-
-
-
- 264 bytes
- Roadmap 2022 - version 5.x
- Non-reversible biometric hash
-
-
-
-
- (at authentication only)
- (at authentication only)
- (from 99% to 99.99%)
- from 1 error out of 10'000 to 1 million
- less than 1% (at FAR = 0.01%, FRR practically closed to 0%)

Performances

Number of Users
Face-to-Camera distance
Average journey

- No limit
- 40 to 70 cms (14 to 27 inches)
- Enrollment: 5 to 10 sec. ; Authentication: 0.5 to 3 sec.

Standards / Data Privacy / Data Protection

RGPD
CNIL
CCPA
FIDO2

- (article 25)
- (2019/01 - article 7 - biometric template type 1)
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- Roadmap 2022 - certification level 1