



AET63-Biotrustkey



Product Information ✚

Fingerprint authentication is the best choice for highly secure applications for its accuracy, convenience and cost-effectiveness. A whole system based on this biometric technology may be expensive, complicated and difficult to maintain, but if you combine it with smart card technology, such should not be the case.

The smart card-fingerprint reader feature of the AET63 BioTRUSTKey makes it deployable in applications of different natures, be it online or offline, for large or small user population, etc. It is an ideal solution for a broad range of applications, including e-commerce, physical/logical access control, banking and point-of-sales transactions.

i) Maximum security via multi-factor authentication and on-board biometric processing

Authentication is two- or three-way. The BioTRUSTKey verifies something "you have" (smart card), something "you are" (fingerprint) and something "you know" (PIN/password). Users carry their fingerprint templates with them and fingerprint verification authenticates only the smart card user, neutralizing privacy concerns and security risks posed by dummy fingerprints or stolen cards. Obviously, anti-security threats are eliminated via more factors of authentication.

Moreover, the BioTRUSTKey performs fingerprint template extraction and matching within the device itself - not in the PC - for maximum security. The 3DES encryption used to protect USB data transmission and the optional secure access module (SAM) further enhance the security delivered by the BioTRUSTKey.

ii) Affordable, flexible and scalable system

By storing the encrypted fingerprint template in a smart card, matching just involves checking the live fingerprint against the stored template. Hence, in contrast to a traditional fingerprint system, a BioTRUSTKey-based system does not require extra provision of fingerprint algorithm, database, server, and network connectivity, lowering both setup and maintenance costs.

Technical Specification ✚

- . Integrated fingerprint scanner/smart card reader
- . Full-speed USB interface
- . Requiring no additional power supply
- . Match-on reader: Template extraction and matching algorithms run within the device itself, not in the PC
- . Large active sensor size - 12.8mm x 18.0mm
- . High-resolution 508 DPI imaging
- . Utilizes CMOS active capacitive pixel sensing technology, resulting to high-quality fingerprint images
- . ISO7816 1/2/3- and PC/SC-compliant
- . Supports all microcontroller cards, with T=0 or T=1 protocols
- . Supports ISO 7816 Class A, B and C (5V, 3V and 1.8V) cards
- . Encrypted fingerprint template stored inside smart card
- . UPEK large area fingerprint sensor
- . (Optional) Session key generation among smart card, BioTRUSTKey processor and host computer
- . (Optional) USB data transmission protection via 3DES encryption
- . (Optional) SAM