Futronic FS26E

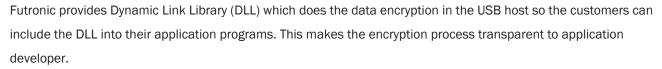## USB2.0 Fingerprint Scanner with Encrypted USB

Description

The Futronic FS26E is a high performance USB2.0 Fingerprint scanner from Futronic with encrypted USB communication. It was certified by the FBI to be compliant with PIV-071006 Image Quality Specification for Single Finger Reader.

The communication between FS26E and USB host is encrypted using the AES256 algorithm. This secures the data going through the USB channel, such as fingerprint, minutiae, user information, etc.
Even there is a USB listener that can capture all the data, it takes a long time to decrypt because of the strong encryption. Thus the data captured by the USB listener is useless.
As there is a powerful CPU in FS26E, the data transmission speed of the encrypted USB communication remains unaffected.
Futronic provides Dynamic Link Library (DLL) which does the data encryption in the USB host so the customers can include the DLL into their application programs. This makes the encryption process transparent to application developer.

A unique Digital Signature can be assigned to each FS26E for device authentication. This makes the Man-in-the-Middle attack impossible. With all these features, the FS26E is a perfect device for customers who need to make strong authentication solution for banks, government authorities and software protection application.

Futronic will provide SDK and technical support to customers.

Features and Benefits

- Meets the US FIPS 201
- AES256 according to FIPS197
- Diffie-Hellman key exchange algorithm, DH2048, according to RFC5114.
- SHA256 for key generation
- Elliptic Curve Digital Signature Algorithm (ECDSA) according to FIPS186-4

For any biometric scanner to capture and/or match fingerprints, biometric software is needed and does not ship with the scanner.
Please contact
Fulcrum Biometrics Southern Africa
to ensure that you are compiling the best solution for your needs.

www.fulcrumbiometrics.co.za

Technical Specifications

Physical	Size: 98 x 98 x 35mm Weight: 200 g Operation temperature: -10 to + 55°C 2M standard USB cable Supply voltage: C 4.5-5.5 V via USB port Power consumption: Active <150mW, Standby <70mW ESD contact - 8KV no permanent damage ESD air discharge - 16KV no permanent damage
Fingerprint Scanner	Window size: 16.26 x 24.38mm Image resolution: 320x480 pixels, 500 DPI, 8 bit grey level Fingerprint image size: 150K Live Finger Detection (LFD) feature
PC Requirements	Windows XP/2003, Windows Vista/2008/2012, Windows 7/8 or higher, Linux with kernel 2.4 or higher, MAC OS (ver 10.5, 10.6 and 10.7, Intel CPU), Android 3.1 or higher
Certifications	FCC, CE, RoHS
Standards/Compliance	FIPS 201/PIV 071006 Image Quality Specification, Microsoft WHQL, PIV FAP20
Compatibility	Fulcrum Biometrics Framework (FbF®), Biodentify, VeriFinger SDK, MegaMatcher SDK, Futronic SDK

Fulcrum Biometrics Southern Africa

Block A, Regent Hill Office Park,
Corner Leslie & Turley Roads,
Lonehill, 2062, Johannesburg,
Gauteng, South Africa
Office: +27-11 702-8550
email: sales@fulcrumbiometrics.co.za

www.fulcrumbiometrics.co.za