FS88H

FIPS201/PIV Compliant
USB2.0 Fingerprint Scanner

FS88H is an enhanced version of FS80H USB2.0 Fingerprint Scanner from Futronic. It was certified by FBI to be compliant with PIV-071006 Image Quality Specification for Single Finger Reader. So FS88H meets the US Federal Information Processing Standard 201(FIPS 201) for Personal Identification Verification (PIV) of Federal Employees and Contractors. It is also listed in the US General Services Administration (GSA) FIPS 201 Evaluation Program Approved Product List.

FS88H uses advanced CMOS sensor technology and precise optical system to meet the rigorous requirement on fingerprint image quality of PIV-071006. Its fingerprint scanning window is crown glass with a thickness of 14mm that resists scratches and other stress to ensure long term heavy duty usage. It is a robust but cost effective single finger capture device and ideal for border control, identity card, driver license, election and any type of civilian AFIS application.

Special electronic circuit is built into FS88H to do Live Finger Detection (LFD). With appropriate software in PC, user can select this LFD feature so that only live finger's fingerprint will be scanned into PC. Fake fingers made from silicone rubber, play-doh, etc, will be rejected. And the LFD feature is included in all Futronic standard software.

A unique serial number is factory-programmed into the USB Device Descriptor of each FS88H. So every FS88H is traceable and this is very important for government identity management projects.

Futronic provides Application Programming Interface (API) for FS88H to capture fingerprint image on the following platforms:

- Windows XP/2003, 32 bit and 64 bit.
- Windows Vista/2008/2012, 32 bit and 64 bit.
- Windows 7/8, 32 bit and 64 bit.
- Linux with kernel 2.4 or higher (for both x86 and ARM9)
- Windows CE 5.0 and 6.0 (for both x86 and ARM9)
- MAC OS(version 10.5, 10.6 and 10.7, Intel CPU)
- Android 3.1 and higher with USB Host port

Compliant to following standards

- FIPS 201/PIV 071006 Image Quality Specification
- Mobile ID FAP20
- Microsoft WHQL
- FCC and CE
- RoHS

Specification

- Fingerprint scanning window size is 16.26 x 24.38mm
- Image resolution is 320x480 pixels, 500 DPI
- Image format is 8 bit 256 grayscale
- Raw fingerprint image file size is 150K byte
- With Live Finger Detection (LFD) feature
- USB 2.0 compatible interface, plug and play device
- Unique serial number programmed to USB Device Descriptor
- With 16K Byte memory for application-specific data storage
- With a 2M standard USB cable
- Small size, 66 x 66 x 29 mm
- Light weight, 150 gram
- Operation temperature: -10 to +55 Degree Celsius

Other Certifications

- Ingress Protection Rating: IP54(scanning window only)

Electrical characteristics

- Light source: Infrared LED
- Supply voltage: DC 4.5-5.5V via USB port
- Power consumption:
    - active <900mW(during scanning)
    - standby <200mW(when scanner is connected PC but no scanning)
    - sleep mode <4mW(activated by standard USB bus event only)
- ESD contact - 8KV and air discharge - 16KV, no permanent damage