

# Futronic FS88H FIPS201/PIV Compliant USB2.0 Fingerprint Scanner

## **Major features and benefit:**

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.



### **Specification**

- Finger scanning window size is 16.26 x 24.38mm
- Image resolution is 320x480 pixels, 500 DPI, 8 bit grey level.
- Raw fingerprint image file size is 150K byte
- With Live Finger Detection (LFD) feature
- USB 2.0 compatible, 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 x29 mm
- Light weight, 150 gram
- Operation temperature: -10 to +55 C

### **FS89H OEM Module**

FS89H is OEM module of FS88H for customers who want to integrate FS88H into their own products, such as handheld POS machine and portable voter registration station. It is same as FS88H but without plastic shell and USB cable so that it can be embedded into any target system. It does not support Live Finger Detection(LFD). Its size is 59(L) x 60(W) x 20(H) mm and weight is 80g. Please contact Futronic for detail mechanical drawing.

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/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.

### **Electrical characteristics**

- Light source: Infrared LED
- Supply voltage: DC 4.5-5.5V via USB port
- Power consumption:
  - Active<900mW(during finger scanning),
  - Standby<200mW,
  - sleep mode<4mW
- ESD contact – 8KV no permanent damage
- ESD air discharge - 16KV no permanent damage.

### **Certifications:**

- FIPS 201/ PIV 071006 Image Quality Specification
- Microsoft WHQL
- FCC and CE, RoHS



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