

# Futronic's FS80H / FS81H USB2.0 Fingerprint Scanner

## Major features and benefit:

Futronic's FS80H USB2.0 Fingerprint Scanner uses advanced CMOS sensor technology and precise optical system to deliver high quality fingerprint image. It can capture an almost un-distorted raw fingerprint image into PC in 100ms. So it is good for any fingerprint recognition application.

Its finger scanning window is a crown glass with a thickness of 14mm. So it is much more reliable and robust compared to any semiconductor type fingerprint sensor.

The finger is illuminated by 4 infra-red LEDs during scanning and the light intensity is automatically adjusted according to scanning fingerprint's characteristics (wet, dry, blurred, etc) to optimize the quality of the captured fingerprint image.

Special electronic circuit is built into FS80H to do Live Finger Detection (LFD). That is, 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's standard software.



### Specification

- Fingerprint scanning window size is 16x24mm
- Image resolution is 320x480 pixel, 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. WHQL approved for Vista 32&64 bit.
- With a 2M standard USB cable
- Small size, 64 x 48 x 27 mm
- Light weight, 120g
- Operation temperature: -10 to +55 C

### FS81H OEM Module

FS81H is OEM module of FS80H for customers who want to integrate FS80H into their own products, such as handheld POS machine and portable voter registration station. It is same as FS80H 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).

FS81H size is 56(L) x 45(W) x 19(H) mm and weight is 80g.

Please contact Futronic for detail mechanical drawing.

### Electrical characteristics

- Light source: Infrared LED
- Supply voltage: DC 4.5-5.5V via USB port
- Power consumption:
  - Active<700mW(during finger scanning),
  - Standby<200mW,
  - sleep mode<2.5mW
- ESD Contact – 8KV no permanent damage  
Air discharge - 16KV no permanent damage

### **Futronic provides USB drivers and API for FS80H to capture a raw fingerprint image on the following platforms:**

- Windows XP/2003, 32 bit and 64 bit.
- Windows Vista/2008, 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.

**Please download demo programs from our website [www.futronic-tech.com](http://www.futronic-tech.com) to try and contact Futronic for more details.**