

## Futronic FS10 1"x1" Fingerprint Scanner

### Major features and benefit:

FS10 is Futronic 1"x1" fingerprint scanner for single-finger scanner market. It was certified by FBI to be compliant with PIV-071006 Image Quality Specification for Single Finger Reader. So it meets the US Federal Information Processing Standard 201(FIPS 201) for Personal Identification Verification (PIV) of Federal Employees and Contractors.

FS10 uses advanced CMOS sensor technology and precise optical system to meet the rigorous requirement of fingerprint image quality of PIV-071006. Its fingerprint scanning window is crown glass 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.

A unique serial number is factory-programmed into the USB Device Descriptor of each FS10. So every FS10 is traceable and this is very important for government identity management projects.



### Specifications

Finger scanning window size : 29 x 29.5mm  
Scanning area : 25.4 x 25.4mm (1"x1")  
Image resolution is 500x500 pixels, 500 DPI  
Color depth 8 bits gray scale  
No interpolation used  
Raw fingerprint image file size is 250K bytes  
USB 2.0 high speed only  
Unique serial number programmed to USB Device Descriptor  
With a 2M standard USB cable  
Small size : 75 x 73 x 36 mm  
Light weight : 200 gram  
Operation temperature: -10 to +55 °C  
Relative Humidity : 0-90% non-condensing

### Electrical characteristics

Light source : Infrared LED  
Supply voltage : DC 4.5-5.5V via USB port  
Power consumption :

- Active < 900mW (during finger scanning),
- Standby < 400mW
- Sleep mode < 2mW

ESD contact – 8KV no permanent damage  
ESD air discharge - 16KV no permanent damage.

### Supported OS Platforms

Futronic provides Application Programming Interface (API) for FS10 to capture fingerprint image on the following platforms:  
Windows XP/2003, 32 bit and 64 bit  
Windows Vista/2008, 32 bit and 64 bit  
Windows 7, 32 bit and 64 bit  
Windows 8, 8.1 32 bit and 64 bit  
Linux with kernel 2.4 or higher (for both x86/ARM9)  
Android 3.1 or higher (with USB host)  
MAC OS(version 10.5 and higher, Intel CPU)  
Please contact Futronic for more details.

### Compliant to following standards

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

### FS11 OEM Module

FS11 is OEM module of FS10 for customers who want to integrate FS10 into their own products, such as handheld POS machine and portable voter registration station. It is same as FS10 but without plastic shell and USB cable so that it can be embedded into any target system. Please contact Futronic for more details.

