

SecuGen's USB fingerprint readers are made with the industry's most rugged and advanced optical sensors using patented SEIR™ technology to give you the highest quality in fingerprint biometrics

SecuGen Hamster™ III

A high-performance and versatile fingerprint reader

Features

- High-quality, rugged, maintenance-free optical fingerprint sensor with ultra-precise 500 DPI resolution
- Hardened fingerprint contact area that's resistant to scratches, impact, corrosion and electrostatic discharge (ESD)
- Compact and ergonomically designed to work with any finger or thumb
- Integrated finger guide
- Removable, weighted stand
- USB connection



Benefits of Using SecuGen USB Fingerprint Readers

SecuGen USB fingerprint readers are easy to install and use with software applications designed with fingerprint identification or verification functions that let your fingerprints act like digital passwords that cannot be lost, forgotten or stolen. SecuGen readers provide consistent performance and security for a growing number of applications and are supported

by a wide range of operating systems and computing environments.

SecuGen readers are backed by the industry's best quality guarantee and years of field use and proven performance under extreme conditions. This helps avoid the cost and inconvenience of field replacements of damaged units made by other sensor manufacturers.

When used for biometric authentication as part of an overall security program, SecuGen readers can help reduce the hassles of password overload, decrease the risks of security breaches, improve accountability and add true non-repudiation, all while making it more convenient and intuitive for almost any user.

SecuGen Sensors are Known for their High Quality

Durable

SecuGen fingerprint sensors are very rugged and feature a virtually indestructible sensor prism. From the sensor surface to the internal lens and electronic components, SecuGen sensors are designed to be strong and dependable to deliver consistent performance in indoor, outdoor and other harsh environments.

Accurate

SecuGen sensors are very accurate thanks to a patented optic design that produces distortion-free images from which data points are extracted for matching. Higher quality images mean greater precision, less false rejection and acceptance, and better overall performance.

Maintenance-free

Unlike semiconductor-based sensors and other optical sensors in the market, SecuGen sensors are made with a hard quartz-like material that needs no coatings but resists scratches, ESD, corrosion and other stress. The optic parts are tightly assembled so that if the sensors are ever dropped, there is no need for recalibration.

Cost-effective

SecuGen designs, develops and manufactures its own fingerprint sensors, which are built to last. SecuGen guarantees the best product quality in the industry, which translates into savings by eliminating costly replacements and losses from system downtime.

Typical Applications

SecuGen readers work with a large variety of software products available through 3rd party developers for applications such as:

- PC, network, enterprise, or internet security
- E-commerce and electronic transactions
- Bank and financial systems
- Medical information systems
- Labor and attendance tracking
- Any password-based application ...

Visit our website for a list of compatible 3rd party software and our SDK Collection at www.secugen.com.

Specifications

SecuGen Hamster™ III

General

Dimensions (W x L x H)	27 x 40 x 73 mm (without stand)
Weight	100 g (without stand)
Operating Temperature	0° to 40° C
Operating Humidity	< 90% RH, noncondensing
Cable Length	1550 mm
Certification / Compliance	FCC, CE, RoHS

Optical

Sensor	FDU02R™
Image Resolution	500 DPI ± 0.2 %
Image Size	260 x 300 pixels
Platen Size	16.1 mm x 18.2 mm
Effective Sensing Area	12.7 mm x 14.9 mm
Image Grayscale	256 shades (8-bit gray level)
Image Type	Non-lossy
Distortion (nonlinear)	< 0.1 %
Sensing Prism Hardness	750 Hk (6.8 Mohs)
Light Source	Red LED
Lifetime (typical)	60,000 hours
Ambient Light Tolerance	5,000 Lux

Electrical

Power Supply	Via USB connection
Operating Voltage	5V ± 5 %
Current Consumption (max)	145 mA @ 5V
Current Consumption (operating)	< 80 mA @ 5V
Current Consumption (standby)	< 3 mA @ 5V
ESD Tolerance	> ± 15 kV

Communication

Interface	USB 1.1 (Bulk mode), USB 2.0 (Full speed compatible)
Communication Speed (max)	12 Mbps
Image Capture Speed (continuous)	0.4 seconds
Image Capture Speed (snapshot)	1.3 seconds
Latent Fingerprint Check Delay	1 second

Other

Operating Systems Supported	Windows Vista, XP, 2000, Me, 98 SE, Server 2003 Windows CE, CE.NET, Linux, Novell
Warranty	Three year limited
Drivers included on CD	Also available at www.secugen.com/download
Available Development Tools	SecuGen SDK Collection
Software Compatibility	See www.secugen.com/products for listing of compatible software



What's Inside

At the heart of the SecuGen Hamster III is the FDU02R™ sensor, made with SecuGen's ultra-precise OPP03-series optic module.



More Features of SecuGen's Next-Generation FDU02R™ Sensor

- Works well with dry, wet, aged, scarred or problematic fingerprints
- Highly durable and rugged - proven to resist electrostatic shock, impact, drops, scratches, extreme temperatures, humidity, electrostatic discharge, and contaminants (sweat, dirt, oil, etc.)
- Ultra-precise, FBI-compliant 500 DPI resolution
- Patented Surface Enhanced Irregular Reflection (SEIR™) optical technology for clear image quality with high contrast, high signal-to-noise ratio, and practically no distortion
- High Sensor-to-Sensor Consistency for high accuracy when matching templates enrolled with different fingerprint readers
- Solid engineering and superior materials allows for use under extreme conditions
- Can be integrated into many types of software applications using the SecuGen SDK Collection
- Checks for and rejects latent fingerprints and 2-D fingerprint images (i.e. photocopies) ¹
- Encryption of fingerprint templates so they cannot be used to reconstruct fingerprint images ²
- **Multi-Device Connectivity™**
Allows multiple FDU02R devices to be connected to one computer at the same time ²
- **Device Recognition™**
Uses a programmable internal serial number to identify and differentiate FDU02R devices ²

¹ Feature dependent upon software application used

² Option available with SecuGen SDK Collection



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