Hamster™ Pro 20

SecuGen
Biometric Solutions

SecuGen Hamsters are the industry's most accurate, rugged, and affordable USB fingerprint readers. These high-performance, versatile readers feature advanced optical sensors engineered with patent-pending technology to give you the highest quality in fingerprint biometrics.

Features

- Accurate, patent-pending optical USB fingerprint sensor with 500 DPI resolution
- Auto-On™ automatically detects a finger when placed on the reader
- Smart Capture™ works with dry, moist, aged, scarred, and difficult-to-scan fingers
- Scratch, impact, corrosion, and electrostatic shock resistant glass platen
- Ultra-compact, low profile design
- FBI Certified for FIPS 201 (PIV) and Mobile ID FAP 20
- Supports SecuGen, MINEX Certified, and third party algorithms
- Supports international and U.S. biometric standards

Benefits

- Improved security with convenience and reduced password reset requests because fingerprints act like digital passwords that cannot be lost, forgotten or stolen
- Improved accountability by allowing users to quickly and easily prove that they are who they are with their fingerprints
- Reliable and consistent performance for an ever-increasing number of applications designed for desktop, mobile, network, enterprise and Internet environments
- Backed by the industry's best quality guarantee with over a decade of field use and proven performance under extreme conditions

FBI Certified

SecuGen Provides the Highest Quality in Fingerprint Biometrics at Affordable Prices

Durable

SecuGen fingerprint sensors are extremely 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 an ultra-compact, patent-pending optic design that produces high quality images that result in 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 hardened glass that needs no coatings but resists scratches, ESD, corrosion and other stresses. 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 that 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 many kinds of applications to increase security including:

- Computer, network or internet security
- Bank and financial systems
- Medical information systems
- Labor and attendance tracking
- Any password-based application ...

Free SDKs

With a variety of SecuGen SDKs to choose from, SecuGen readers are easy to integrate into almost any kind of application.

Request free SDKs or search for compatible software at www.secugen.com.

Specifications

Product Name	Hamster Pro 20
Model Number	HU20
Fingerprint Sensor	

Optic Module	U20
Image Resolution	500 DPI
Image Size	300 x 400 pixels
Platen Size	18.2 mm x 22.9 mm
Effective Sensing Area	15.24 mm x 20.32 mm
Image Grayscale	256 levels (8-bit)
Light Source / Typical Lifetime	LED / 60,000 hours
Fingerprint Capture Speed	0.2 ~ 0.5 sec with Smart Capture

Electrical / Communication

Interface	USB 1.1 Full-Speed, USB 2.0 Hi-Speed
Supply Voltage	5 V DC (via USB)
Current Consumption (max)	150 mA

Physical

Dimensions (W x L x H)	53.9 x 58.5 x 31.6 mm
Weight	98 g
Cable Length	1500 mm
Operating Temperature	-20º ~ 65ºC
Operating Humidity	90% or less RH, noncondensing

Other

Supported Operating Systems	Windows 8.1, 8, 7, Windows Server 2012, 2008 R2, 2003, Java, Linux
Supported Standards	FBI PIV-071006 & Mobile ID FAP 20, INCITS 378, BioAPI, ISO/IEC 19794-2, ISO/IEC 19794-4, FCC, CE, RoHS, FIPS 201 (HSPD-12)
Compliance	
Warranty	One year limited

GSA FIPS 201 APPROVED

What's Inside a Hamster Pro?

At the heart of the Hamster Pro readers are SecuGen's ultra-compact, next-generation fingerprint sensors with advanced features including:

- **Auto-On™** that automatically detects the presence of a finger when placed on the reader for quick and easy authentication [1]

- **Smart Capture™** that captures high quality fingerprints from dry, moist, aged, scarred and difficult-to-scan fingers for greater accuracy and reliability [1]

- **High durability and ruggedness** with proven resistance to electrostatic shock, impact, drops, scratches, extreme temperatures, humidity, and contaminants such as sweat, dirt, and oil

- **Patent-pending optical technologies for clear, accurate imaging** with high contrast, high signal-to-noise ratio, and low distortion

- **Reliable performance** even under challenging conditions and tough environments

- **Rejection of false fingerprints** such as latent prints and 2-D fingerprint images such as photocopies [2]

- **Fingerprint data protection** with templates that cannot be used to reconstruct fingerprint images [2]

- **Greater sensor-to-sensor consistency** for high accuracy when matching fingerprints enrolled with different fingerprint readers at different locations

- **Ease of integration** into many types of applications using a wide offering of free Software Developer Kits

- **Multi-Device Connectivity™** that allows multiple fingerprint readers to be connected to one computer at the same time [2]

- **Device Recognition™** that uses a programmable internal serial number to identify and differentiate multiple fingerprint readers [3]

[1] Auto-On and Smart Capture are built into the sensor but need to be enabled by the software application that calls for a fingerprint scan.
[2] Feature dependent upon software application used
[3] Option available with SecuGen SDKs

SecuGen Biometric Solutions

SecuGen Corporation   **www.secugen.com**

Open the World with Your Fingertip!®