

SecuGen Hamster Pro Duo/CL is suitable for any contactless smart card application where dual factor authentication is needed for higher security without sacrificing convenience. It features the industry's most accurate, rugged, and affordable USB fingerprint reader to give you what the SecuGen brand is known for, the highest quality in fingerprint biometrics.

**Durable    Accurate    Maintenance-Free    Cost-Effective**

## Features

- Accurate, patent-pending optical USB fingerprint sensor with 500 DPI resolution
- CCID compliant smart card reader with built-in antenna for NFC tag access, USB firmware upgradability, and SAM (Secure Access Module) slot for high level of security in contactless applications
- Auto-On™ automatic finger detection and Smart Capture™ for quality scanning of dry, moist, aged, scarred, and difficult-to-scan fingers
- Sleek, ergonomic design
- Fingerprint sensor FBI Certified for FIPS 201 (PIV) and Mobile ID FAP 20



## 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

## ***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***

Physical Access Control  
Personal Identity Verification  
National ID Programs  
Any dual factor NFC / fingerprint biometric 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](http://www.secugen.com).

<b>Product Name</b>	Hamster Pro Duo/CL
<b>Model Number</b>	XU20CL
<b>General</b>	
Dimensions (W x L x H)	77.5 x 160.0 x 37.7 mm
Weight	250 g
Operating Temperature	0° ~ 50° C
Operating Humidity	10 ~ 90%
Interface	USB 1.1 Full-Speed, USB 2.0 Hi-Speed
Supply Voltage	5 V DC (via USB)
Current Consumption (max)	450 mA
Supported Operating Systems	Windows 8.1, 8, 7, Server 2012, Server 2008 R2, Server 2003, Linux, Android 3.1 and above
Compliance	FCC, CE, RoHS
Warranty	One year limited
<b>Fingerprint Sensor</b>	
Optic Module	SecuGen U20 fingerprint reader
Image Resolution / Size	500 DPI / 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
Supported Biometric Standards	FIPS 201 (HSPD-12), FBI PIV-071006 & Mobile ID FAP 20, INCITS 378, BioAPI, ISO/IEC 19794-2, ISO/IEC 19794-4
<b>Card Reader</b>	
Model / Type	ACR1251U1-A1 / contactless smart card reader
Operating Distance	Up to 50 mm (depending on tag type)
Operating Frequency	13.56 MHz
Supported Smart Card Interface	ISO14443 Type A & B, Mifare, FeliCa, 4 types of NFC (ISO/IEC18092) tags
Supported APIs	PC/SC, CT-API (through wrapper on top of PC/SC)
Built-in Peripherals	User-controllable bi-color LED and buzzer, ISO 7816 compliant SAM slot
Compliance	ISO 18092, ISO 14443, ISO 7816, PC/SC, CCID, LASCOR, EN60950/IEC60950, VCCI, MIC, KC



## What's Inside a Hamster Pro?

At the heart of 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 <sup>1</sup>
- **Smart Capture™** that captures high quality fingerprints from dry, moist, aged, scarred and difficult-to-scan fingers for greater accuracy and reliability <sup>1</sup>
- **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
- **Fingerprint data protection** with templates that cannot be used to reconstruct fingerprint images <sup>2</sup>
- **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 <sup>2</sup>
- **Device Recognition™** that identifies and recognizes different fingerprint readers <sup>2</sup>

<sup>1</sup> 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.

<sup>2</sup> Feature dependent upon software application used