

**SDA04P™**  
**SDA04PX™**  
**SDA04PIV™**

**SecuGen**

## Fingerprint Sensor OEM Modules

From the world's leading supplier of advanced, optical fingerprint technology for embedded systems...

SecuGen's SDA fingerprint sensor OEM modules are made with the industry's most rugged and accurate optical sensors based on patented SEIR™ technology.



**FBI Certified**

## ***SecuGen Provides the Highest Quality in Fingerprint Biometrics at Affordable Prices***

### ***Durable***

With a virtually indestructible sensor prism, the SecuGen sensor is extremely rugged. SecuGen sensors are designed to be strong for dependable and consistent scanning even outdoors and under harsh or high traffic environments.

### ***Accurate***

SecuGen sensors are very accurate thanks to an ultra-compact, patented optic design that produces high quality images for greater precision, less false rejections/false acceptances, and better overall performance compared to competing fingerprint sensors.

### ***Maintenance-free***

Unlike semiconductor-based sensors and other optical sensors, SecuGen sensors are made with hardened glass that needs no coatings or special protection. SecuGen sensors resist scratches, ESD, corrosion, and other stresses and can be easily wiped clean without fear of damage.

### ***Cost-effective***

SecuGen designs, develops, and manufactures its own fingerprint sensors that are built to last and deliver solid performance for years, making SecuGen sensors the most cost effective choice.

***Since 1999*** SecuGen fingerprint technology has been used in over 100 countries around the world. Our sensors have been integrated with a wide variety of security applications including access control and labor tracking systems, door locks, and kiosks.

We continually research and develop new and improved technologies and are pleased to offer our latest and best in the SDA line of fingerprint sensor OEM modules.

# Technical Specifications

## SDA04P, SDA04PX

## SDA04PIV

## Developer Kits

Each fingerprint sensor OEM module includes:

- Optic Module
- Board with CPU, Memory & Embedded Algorithms
- FPC Cable



**FBI Certified**

Each SDA Developer Kit includes:

- Choice of one SDA OEM module
- C9 and RS232 cables
- DB9 interface board
- 3.3V DC power supply
- CD with software and documentation
- One year of support

### Optic Module

**Optic Module**  
**Image Resolution / Size**  
**Sensing Area / Platen Size**  
**Fingerprint Capture Time**  
**Light Source / Typical Lifetime**  
**Dimensions / Weight**

SDOPP03P  
 500 DPI / 260 x 300 pixels  
 13.2 x 15.2 mm / 16.1 x 18.2 mm  
 0.2 ~ 0.5 second with Smart Capture  
 LED / 60,000 hours  
 21 x 32 x 62 mm / 32 g

SDOPP04P  
 508 DPI / 258 x 336 pixels  
 12.9 x 16.8 mm / 16.1 x 18.2 mm  
 0.2 ~ 0.7 second with Smart Capture  
 LED / 60,000 hours  
 21 x 32 x 62 mm / 32 g

### Description

The Developer Kit provides the hardware, software, and support needed to help accelerate the design and integration of SecuGen's OEM module into stand-alone or networked devices.

### Board

**CPU / Flash Memory**  
**Storage Capacity**  
**Minutiae Extraction Time**  
**Matching Time (1:1)**  
**Matching Time (1:N)**  
**MINEX Compliant Algorithms**  
**Fingerprint Template**  
**Communication Speed (max)**  
**External Interface**  
  
**Dimensions / Weight**

533 MHz ARM / 128 MB  
 10,000 users (1:1 or 1:N)  
 < 0.3 second  
 < 0.1 second  
 < 0.2 second  
 No  
 SecuGen, INCITS 378, ISO 19794-2  
 921,600 bps  
 RS232 Serial (SDA04P only), Wiegand (SDA04P only), GPIO (SDA04P only), CMOS Level Serial  
 59 x 43 x 8 mm / 16 g

533 MHz ARM / 128 MB  
 10,000 users (1:1 or 1:N)  
 < 0.9 second  
 < 0.1 second  
 < 0.4 second  
 Yes  
 SecuGen, INCITS 378, ISO 19794-2  
 921,600 bps  
 RS232 Serial, Wiegand, GPIO, CMOS Level Serial  
 59 x 43 x 8 mm / 16 g

### Features

APIs and data conversion modules are provided in the Developer Kit to expand the capabilities of your biometric system with these functions:

- Verify or identify authorized users by their fingerprints
- Register and manage user profiles
- Interface with PC and SecuGen USB fingerprint readers
- Adjust imaging parameters, quality thresholds, and security levels
- Test all functions

### Other

**Supply Voltage**  
**Current Consumption**  
**Operating Temperature**  
**Operating Humidity**  
**Auto-On™ & Smart Capture™**  
**Compliance / Certification**  
**Optional Water Resistance (WR)**

3.3 V DC  
 120 mA (idle), 400 mA (operating)  
 -20° ~ 65° C  
 90% or less RH, noncondensing  
 Yes  
 RoHS  
 Water-resistant optic module

3.3 V DC  
 120 mA (idle), 400 mA (operating)  
 -20° ~ 65° C  
 90% or less RH, noncondensing  
 Yes  
 RoHS, FIPS 201 / FBI (PIV Single Finger)

# SecuGen

Open the World with Your Fingertip!®

Founded in 1998, SecuGen is a leading provider of advanced optical fingerprint recognition technology for physical and information security. Our high quality biometric sensors have been used all around the world in diverse areas such as government, finance, health care, law enforcement, education, retail, manufacturing, and transportation.

[www.secugen.com](http://www.secugen.com)