

SecuGen Unity devices are the industry's most accurate, rugged, and affordable all-in-one fingerprint recognition systems. These high-performance, versatile devices feature advanced optical sensors engineered with patented technology to give you the highest quality in fingerprint biometrics.

Wireless Accurate Durable Maintenance-Free Cost-Effective

Features

- Fingerprint scanning, processing, extraction and matching all in one device
- Bluetooth connectivity, pairs with mobile and desktop devices
- Accurate, patented optical fingerprint sensor with 500 DPI resolution
- Auto-On™ automatic finger detection and Smart Capture™ for quality scanning of dry, moist, aged, scarred, and difficult-to-scan fingers
- Scratch, impact, corrosion, and electrostatic shock resistant glass platen
- Ergonomic, dust and water-resistant design for both handheld and desktop use
- FBI Certified for FIPS 201 (PIV) and Mobile ID FAP 20



FBI Certified

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 their identities with their fingerprints
- Reliable and consistent performance for an ever-increasing number of applications designed for mobile, desktop, network, enterprise, and Internet environments

The Highest Quality in Fingerprint Biometrics at Affordable Prices

Accurate

SecuGen sensors are very accurate thanks to a patented optic design that produces high quality images for greater precision, fewer false rejections and 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.

Typical Applications

- Mobile, PC, or network security
- Bank and financial systems
- Medical information systems
- Law enforcement
- Any mobile biometric application

Durable

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

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.

Free SDKs

With a variety of free Software Development Kits to choose from, SecuGen readers are easy to integrate into almost any kind of application.

Request a free SDK at secugen.com today!

Specifications

Product Name	Unity 20 Bluetooth
Model	HU20-ASF-BT2
Fingerprint Sensor	U20-A
Image Resolution	500 DPI
Image Size	300 x 400 pixels
Platen Size	18.1 mm x 22.9 mm
Effective Sensing Area	15.24 mm x 20.32 mm
Image Gray Scale	256 levels (8-bit)
Light Source	LED
Smart Capture Speed	0.2 ~ 0.5 seconds
Biometric Functions	Fingerprint scanning, template extraction, template matching, and template storage
Storage Capacity	1,400 templates (700 users)
Features	Fingerprint Management System (FMS) API pre-installed, Auto-On, Smart Capture, 360 Degree Fingerprint Rotation
Bluetooth	Bluetooth V4.2 (HS) with Integrated Class 1.5 PA and Low Energy (BLE) support; BT host digital interface: UART (up to 4 Mbps); Coexisting IEEE wireless technology on integrated die solution
Battery	Rated Capacity: 1000 mAh; Internal Resistance: ≤ 70 m Ω ; Voltage (V): 3.7 (nominal), 4.2 (charged), 2.75 (discharge cut-off)
Biometric Standards/Specs	INCITS 378, ISO/IEC 19794-2, 19794-4, FIPS 201, FBI PIV & Mobile ID FAP 20, NIST MINEX, WSQ
Dimensions	45.2 x 103.3 x 36.7 mm
Weight	90 g
Operating Temperature	-10° ~ 60° C
Operating Humidity	90% noncondensing, max
USB Port	Micro-USB for charging
Supply Voltage	Built-in battery or 5V DC (via USB)
Max Current	200 mA @3.7V, 1000 mA @5V
Dust/Water Resistance	IP54 Certified
Compliance/Certification	FCC, CE, KC, RoHS3
Warranty	One year limited
Supported OS	Windows 11 / 10, Windows Server 2022 / 2019 / 2016 / 2012 / 2008 R2, Android 3.1 and above, Apple iOS and macOS (BLE only)



What's Inside a Unity device?

At the heart of the Unity device is SecuGen's ultra-compact U20-A fingerprint sensor with advanced features including:

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

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

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

Patented 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 images

Fingerprint data protection with templates that cannot be used to reconstruct fingerprint images

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

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 finance, health care, law enforcement, education, retail, manufacturing, and government at all levels.

www.secugen.com