



Unity 20 Serial

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Unity 20 Serial is a low cost, fully programmable stand-alone fingerprint recognition system that scans, processes, and matches fingerprint data for identifying or verifying users. Featuring the industry's most rugged fingerprint sensor, the Unity 20 Serial can securely capture, enroll, match, and store fingerprint data all in one device. Unity 20 Serial communicates via a 9-pin DB-9 connector and can be integrated into applications that need biometric authentication capability such as Point of Sale (POS) terminals, Time and Attendance tracking stations, and other devices where a serial connection is required.



Unity 20 Serial is a finished system that supports RS-232 serial connectivity and is part of the Unity family of all-in-one, stand-alone fingerprint modules with complete biometric functionality built-in, designed to operate entirely without external host systems.

What's Inside

Unity 20 Serial is made with SecuGen's flagship stand-alone [U20-ASF](#) module in an ultra-compact housing with a 20-inch long cable and serial connector. The U20-ASF module consists of a premium FBI-Certified FAP 20 fingerprint sensor, combined with a programmable Single-Board Computer (SBC) that includes onboard CPU, SDRAM, and flash memory. Unity 20 Serial is powered externally via DC jack in the serial connector housing.



Advanced Features for Developers

Developers can use Unity 20 Serial also right out of the box by calling the simple APIs of the pre-installed Fingerprint Management System (FMS) software. Alternatively, the device can be custom programmed using the built-in Linux development environment, MINEX-compliant fingerprint algorithms, OpenSSL cryptography libraries, and 1 GHz CPU. For stronger security, the device can also store encrypted fingerprint templates and process them in a closed environment without ever leaving the device. It also provides high-speed fingerprint matching in either verification mode (1:1) or identification mode (1:N), using the built-in SecuSearch Engine. Integration of the Unity 20 Serial into any application can be facilitated by the Unity OEM Developer Kit described on the [U20-ASF](#) page.

Main Features

- › **FBI Certified (PIV, FIPS 201, Mobile ID FAP 20 Compliant)** [meets FBI Image Quality standards](#)

- › **RS-232 serial connectivity with DB9 connector**

- › Rugged, high-performance, maintenance-free optical sensor resistant to scratches, impact, vibration and electrostatic shock

- › Fast recognition and high quality imaging of difficult fingerprints (dry, wet, scarred) in challenging environments

Fast and accurate verification

Readily accessible for any finger

Auto-On™ – automatic finger detection technology (when used with apps built with SecuGen SDKs)

Smart Capture™ – self-adjusting scanning technology (when used with apps built with SecuGen SDKs)

- › Device Recognition™ – device authentication technology (when used with apps built with SecuGen SDKs)

Fingerprint template encryption (when using SecuGen Proprietary template format)

Latent print rejection (does not accept prior fingerprints left behind on sensor)

Ultra-compact, lightweight and portable

Integrated finger guide