

Finger vein authentication embedded module

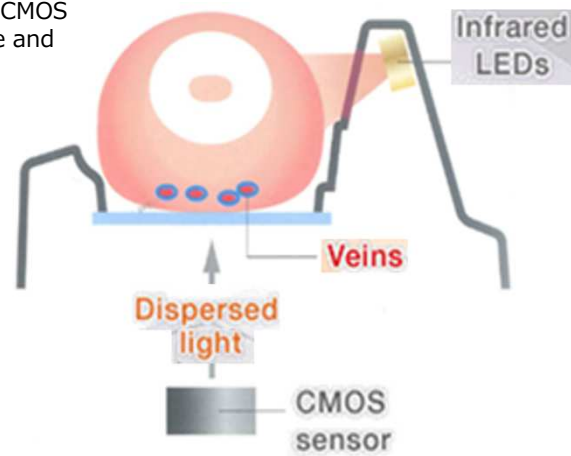
FVA-M2ST



“FVA-M2ST” is a biometric authentication module which uses finger vein patterns to authenticate individuals to provide high-level security. Module has versatility to be embedded into other devices easier than ever.

■ mofiria Technology

mofiria adopts a unique reflective dispersion method, which near-infrared lights emitted from LED is reflected inside the finger, and the vein pattern image is captured by a CMOS sensor. Our device can be designed for plane arrangement that enables smaller size and flexibility in design implementation when embedded to other devices.



mofiria adopts a unique reflective dispersion method



FVA-M2ST Product Picture

Finger Placement Image

■ Features of FVA-M2ST

Interface

Two types of connection interface, USB and RS-232C. It can be utilized for various uses.

Development Kit

We provide libraries compatible with Windows, Android, Linux, and Mac OS, as well as C source code for controlling devices using RS-232C

Expand

We offer a versatile authentication library that can be used not only in standalone environments but also for server-based authentication and verification, as well as integration with existing systems in various scenario

■ Development Service

In addition to providing finger vein authentication modules, we can also support partial or complete design and development of the required boards and mechanisms, as well as OEM provision of finished products, upon consultation. We will fully utilize our expertise to reduce your development burden

mofiria has succeeded to finger vein authentication technology developed by Sony Corporation.

Comparison of biometric technologies

	Failure-to-enroll Rate	False Acceptance	False Rejection	Forgery Difficulty	Secular Change	Template Size	Response Time
mofiria Finger Vein	◎	◎	◎	◎	◎	◎	◎
Fingerprint	▲	▲	▲	▲	▲	◎	◎
Face	○	▲	▲	▲	▲	▲	○
Iris	○	▲	◎	○	○	▲	○
Voice	◎	▲	▲	▲	▲	◎	▲

Internal body information! Vein authentication—a biometric solution that is nearly impossible to replicate with generative AI and ensures privacy protection

Advantages of finger vein authentication

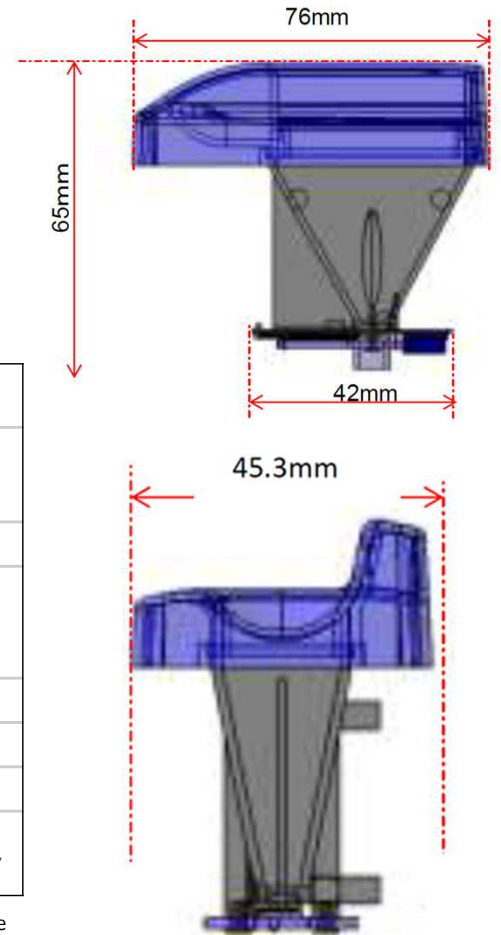
- ① Each person, Each Finger has a different vein pattern.
- ② Vein pattern will see no major change during an individual's life.
- ③ The only biometric authentication that uses internal information beneath the skin among commonly adopted methods
 - 1 : Not impacted by fingers' surface condition. (e.g. dry, wet, rough, dirty, etc.)
 - 2 : Because it is not visible or traceable from the outside, forgery and impersonation are extremely difficult

FVA-M2ST Specifications

Voltage / Current	Authentication mode: DC 5V 250mA or less Sleep mode: DC 5V 5mA or less
Power supply	USB Bus power or DC 5V (RS232C Interface) +/- 10% * It can communicate using RS-232C interface while electrified from USB port
Dimensions	Approx. 76 × 65 × 45.3mm (W/H/D)
Interface	USB: USB 2.0 Full Speed, RS-232C: whichever having interface feature of Baud rate 115.2kbps * Choose either one of both interfaces to connect.
Weight	Approx. 32 g
Sensor	Electrostatic
Certification	CE, FCC
Supported OS	Depends on supported OS by mofiria's software development kits compatible with this device (Windows, Linux, Android, Mac and so on)

※ The finger vein authentication function cannot be used with the FVA-M2ST alone. Software compatible with this device is required.

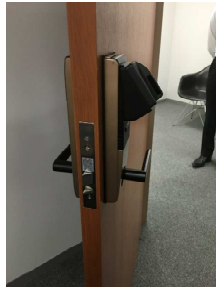
Dimension drawing



USE CASES



ATM



Door



Cabinet



ID management

- Specifications are subject to change without notice due to continual improvements. For the latest info, please visit mofiria web site.
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As of JAN 2025

Where to buy

mofiria Corporation
Head quarter: Tokyo, Japan

