

Hyosung's Next Generation ATMs with Fujitsu PalmSecure Technology Revolutionize Industry

Full function, high-capacity self-service ATMs from Hyosung integrated with Fujitsu palm vein biometric authentication technology for enhanced security



Key Facts:

- Hyosung raises the bar for innovation, responsiveness and reliability in the ATM Industry
- Fujitsu PalmSecure technology creates a hygienic, secure verification method
- Hyosung ATMs with PalmSecure lead the charge in revolutionizing the ATM Industry

Hyosung is leading the evolution of self-service banking in retail and financial institutions. Through innovative technology and industry expertise, Hyosung engineers ATMs with the enhanced functionality and usability modern users expect.

Hyosung's state-of-the-art ATM solutions are uniquely designed to optimize operations for businesses of all sizes. Every ATM product, service and support system is engineered for flexibility and reliability. The modular design allows technicians to easily swap parts, resulting in minimal down time and fast resolutions.

Traditional ATMs require forms of identification such as an ID card and password or PIN. However, those forms of ID are easy to lose, steal, share or forget. Fujitsu developed PalmSecure technology, a more secure form of biometric authentication which uses a unique characteristic that individuals always have with them and cannot be transferred: their palm veins.

For enhanced security, Hyosung partnered with Fujitsu to integrate PalmSecure biometric authentication technology into its ATMs. PalmSecure provides enhanced security to Hyosung's MX8200QTN, MX8200QT, and MX8800 branch transformation self-service devices as well as its 7800 series and 8300 series ATMs.

Hyosung ATMs

Fastest growing, industry leading

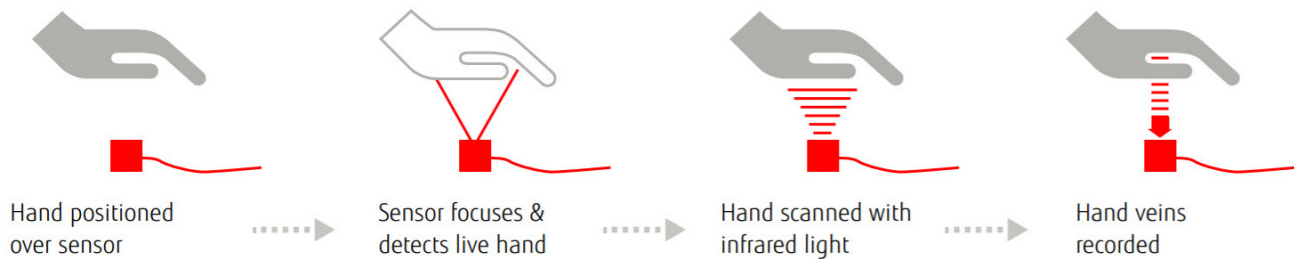
Hyosung's traditional and recycling ATMs are designed to deliver the highest availability in the market. A modular design and next generation technology helps businesses optimize operations faster.



“At Hyosung, our goal is to continually improve our product by applying real solutions that work. Fujitsu PalmSecure technology provides the security, reliability and innovation that has made us a world leader in the ATM marketplace,” Hee-Eun Ahn, CEO of Hyosung America, said.

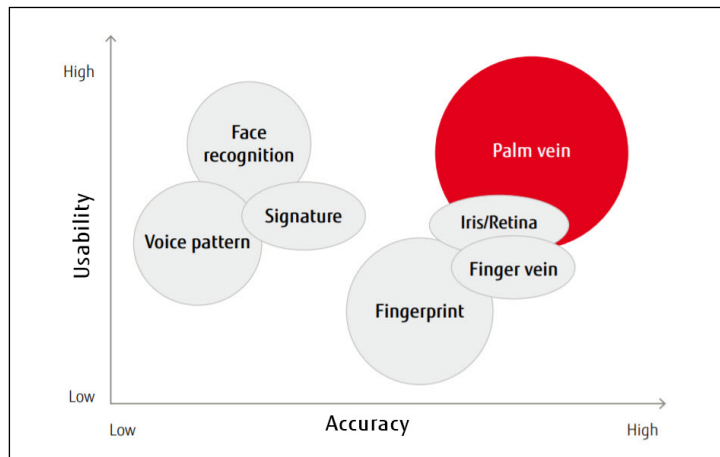
Fujitsu’s PalmSecure biometric authentication technology is a contactless, hygienic form of biometric security that is easy to use and extremely accurate. It reads the palm vein patterns hidden under the skin to accurately identify and verify individuals. ATM users simply hold their hand two inches above the sensor to authenticate via their unique palm vein pattern and gain access to their account.

When a person places their hand above the PalmSecure sensor, it emits a near-infrared light that records the palm vein pattern and the sensor encrypts the received data. The encrypted data is transferred to the PC, and the software converts it to a biometric template and assigns it an individual key.



Palm vein authentication technology is the only internal biometric modality, making it virtually impossible to forge or spoof. With presentation attach detection and superior encryption, palm vein vascular recognition technology is the most secure form of biometric authentication. PalmSecure has significantly low false acceptance rates of 0.00001% and false read rates of 0.01%.

	False Acceptance Rate (%)	False Rejection Rate (%)
Fujitsu Palm Vein	< 0.00001	≈ 0.01
Iris/Retina	≈ 0.0001	≈ 0.01
Finger Vein	≈ 0.0001	≈ 0.01
Fingerprint	≈ 0.001	≈ 0.1
Voice Pattern	≈ 0.01	≈ 0.3
Face Recognition	≈ 1.3	≈ 2.6



Compared to finger vein authentication, palm vein technology has 10 times the data points for superior security. External factors such as abrasians, hair, skin conditions, and water or lotions have little impact on the technology’s ability to recognize an individual’s identity.

Additionally, if an individual is unable to use a palm to enroll for any reason, Fujitsu's biometric authentication system allows those individuals to utilize the technology by using a different part of their body, so long as they consistently use the same body part for authentication. For example, individuals who do not have a hand could authenticate using the vein patterns in their cheek.

About Fujitsu Limited

Fujitsu is the leading Japanese information and communication technology (ICT) company, offering a full range of technology products, solutions, and services. Approximately 132,000 Fujitsu people support customers in more than 100 countries. We use our experience and the power of ICT to shape the future of society with our customers. Fujitsu Limited (Code: 6702) reported consolidated revenues of 4.0 trillion yen (US \$36 billion) for the fiscal year ended March 31, 2019. For more information, please see www.fujitsu.com.

About Fujitsu Frontech North America Inc.

Fujitsu Frontech North America Inc. (FFNA) provides market-focused IT solutions that enable customers to achieve their business objectives through integrated offerings for self-checkout and currency management solutions, kiosks, mobile, RFID, and biometric authentication technology. FFNA delivers industry-specific solutions for the manufacturing, retail, healthcare, government, education, financial services, and enterprise and communications sectors throughout North America. FFNA is headquartered with operations and product development at 27121 Towne Centre Drive, Foothill Ranch, CA 92610.

About Hyosung America

Hyosung America is the U.S. subsidiary of Hyosung, Inc., a global leader in providing ATMs, TCRs and software solutions to the retail off-premises and financial institution markets. Since entering the North American market in 1998, Hyosung has been the fastest growing ATM company in North America. Hyosung is established as the Retail market leader and has accelerated its growth in the Financial market as a leading provider of recycling and branch transformation solutions. Hyosung is headquartered in Irving, Texas, and provides research and development support in its Global Software Center in Dayton, Ohio. For more information, please see www.hyosungamericas.com.



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Hee-Eun Ahn
CEO
Hyosung America