



MagneSafe[®] Security Architecture

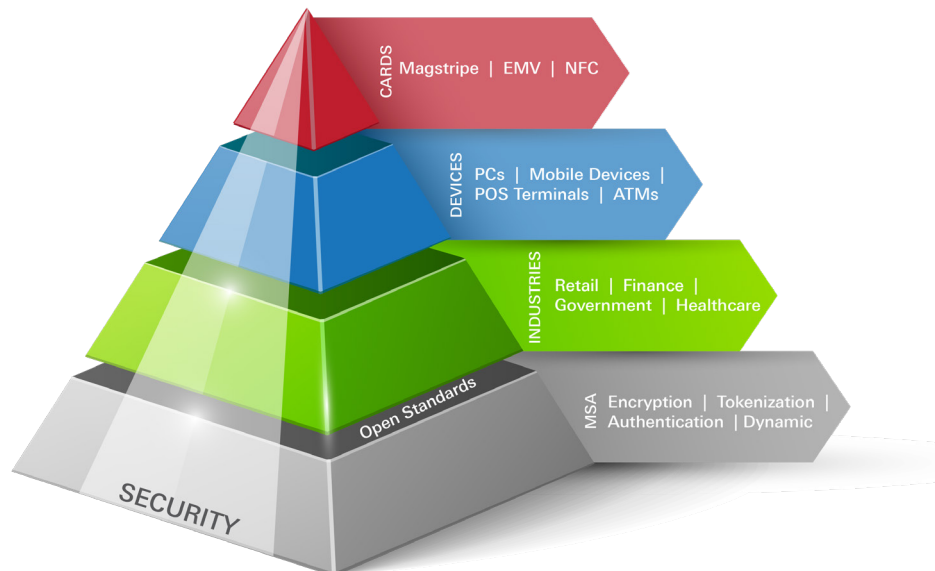
Four cornerstones of security:

Strong encryption, secure tokenization, authentication, and dynamic data.

Everything MagTek does is built around our core MagneSafe Security Architecture (MSA). MagneSafe is a digital identification and authentication architecture that safeguards consumers and their personal data. Designed to exceed PCI regulations, MagneSafe leverages strong encryption, secure tokenization, counterfeit detection, tamper recognition, data relevance and integrity, and dynamic digital transaction signatures, which together validate and protect the entire transaction and each of its components. MagneSafe's multi-layer security provides unmatched protection and flexibility for safer online transactions.

MagneSafe is supported by the entire payment and identification industry including retail, financial institutions and government agencies. MagneSafe is supported in MagTek POS terminals; other POS terminals including Verifone, Hypercom, and Ingenico; ATM machines, in teller lines, back offices, PCs; and smart phones and tablets including iOS and Android devices.

MagTek's MagneSafe Security Architecture is an open, flexible and secure core architecture to build upon, backed by MagTek's over four decades of commitment to continue to deliver the highest quality secure products, services, and support for all of your evolving needs.





Form Factors

MagneSafe works using the most widely used and accepted payment form factor in the world. The MagneSafe Security Architecture works with the 5.5 billion magnetic stripe cards already in circulation including those coupled with EMV and contactless NFC EMV.



Tokenization

Supports both single use and multiple use tokens that work with any payments processor. Magensa Tokenization Service is a cloud-based, data protection service supporting the generation, transport and redemption of dynamically generated tokens that can be easily integrated into any application or business process. Major features include: Dynamic Tokenization, Unique, Vaultless Solution, Security and Key Management, and Platform-as-a-Service.



MagneSafe stops fraud

Counterfeit card data cannot get into the system and valid card data cannot be breached out of the system. MagneSafe delivers a layered approach to transaction security and combines encryption, tokenization, authentication and dynamic data to protect card data at the moment the card is swiped.

The MagneSafe Security Architecture provides the maximum security at the minimum cost, both in total dollars and implementation efforts.



Authentication

Card Authentication

MagnePrint® card authentication, a patented, proven technology reliably identifies counterfeit credit cards, debit cards, gift cards, ATM cards and ID cards at the point of swipe, before fraud occurs. MagnePrint is a dynamic card authentication technology based on the unique physical properties of the magnetic stripe. It provides validation that the card itself is genuine and that its encoded data has not been altered.

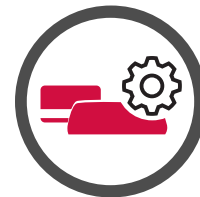
Device Authentication

Protection against rogue devices with secure key injection and mutual authentication between the payment device and the host.



Encryption

Magensa utilizes open standard and industry proven Triple DES encryption and DUKPT (derived unique key per transaction) key management to provide a comprehensive security solution that protects cardholder data. Its open platform does not require you to invest in costly, untested, proprietary solutions that can limit your long-term flexibility and options. MagTek secure card reader authenticators and PIN PEDs deliver instant encryption inside the hardware, which is more secure than software. This places only encrypted data into the transaction environment and secures the data while in the systems under test.



Dynamic Data

Each swipe provides a unique identifier. DUKPT key management coupled with MagTek secure card reader authenticators' ability to read more data, including the actual natural change in the swipe output with each swipe, produces its own unique data set per swipe.