MAGENSA™
A MAGTEK COMPANY

Magensa Services
Overview

Magensa provides data protection and payment gateway services to major financial institutions, retailers, restaurants, and other commercial organizations around the globe, securing sensitive data and processing high volumes of transactions. Companies interested in protecting personally identifiable information (PII), performing secure payments, and transmitting non-payment data use a variety of Magensa Services that leverage our cryptographic cloud services. Magensa's uniqueness stems from the flexibility and value our services provide ISVs, developers, and integrators.

Magensa Payment Gateway Services
Delivers ISVs and developers:

SERVICES
- Gateway
- Key

RESOURCES
- Data Protection
- Key Management
- Secure Card Readers

- PCI-DSS certified environment for securely processing payment transactions.
- EMV certifications with leading payment processors including FIS (WorldPay), Fiserv (First Data), TSYS, Heartland, NAB (EPX), Elavon, and Chase.
- Flexibility of using a broad combination of Dyna family products
- Retail, restaurant, fuel, eCommerce, gift, and loyalty card application certifications with some or all processors.

Magensa responds to customer requests to further the service and certifications.

Magensa Payment Protection Gateway (MPPG)
- Payment gateway supporting traditional Sale, Auth, Capture, Void, and Refund transactions to integrated processor endpoints.
- XML/SOAP or a JSON/REST request containing encrypted data from a device or token.
- MPPG then decrypts the data or token and formulates a call based on the operation request and sends to the processor associated with the merchant credentials.
- A return authorization from the processor is passed through MPPG to the calling application along with a card token.

MPPG homogenizes the interface to processors abstracting the development effort to switch between supported processors.

MPPG Touch-Free Platform
Central to Magensa's payment gateway services is the ability to deliver touch-free solutions on location, in mobile, or on-line. Security through dynamic encryption and tokenization, a PCI-DSS infrastructure, and omni-channel support to initiate and complete payments are at the heart of the Magensa touch-free platform:

- **Magensa Payment Request** (URL links or QR Codes): Payment is secured through a Magensa hosted payment page with the payment app updated via web socket connection

to Magensa. Display or print QR codes to launch a secure payment page for touch-free pay-at-the-table or curbside. Send a link by email or text for invoice or payment request.

- **Magensa TokenExchange Connect:** eCommerce payments facilitated by embedded client-side JavaScript enabling direct connection to Magensa hosted, customer branded payment form. TokenExchange Connect is also implemented for secure integrated manual entry within POS apps or to establish card on file for apps.

- **Magensa Token Exchange Cross Merchant Tokens:** Support card-on-file for consumer profiles across multiple merchants via Magensa merchant token service linking

- **Tap-and-Go Acceptance:** MagTek Dyna readers that exclusively, or in combination with other capabilities, support contactless cards or mobile wallets on a stand, built into a phone or tablet case, or at a kiosk.

- **In-app/web-app digital wallet payments:** ApplePay and GooglePay payment support for frictionless payments in-web or in-app.

- **MPPG Manual Entry Portal:** Portals to facilitate merchant keyed transaction – standalone.

- **Magensa PayPal/Venmo Integration:** Support for consumer-initiated transactions through Magensa with PayPal as another processor endpoint

These touch-free options are available for transacting securely through Magensa payment gateway services.

MPPG Portals and APIs
Magensa has a variety of tools available for resellers and merchants within MPPG to on-board as well as provide merchant insights and transaction reporting. These include:

- **MPPG Reseller Portal:** Portal for ISVs/Resellers to board, view, and report on their merchants

- **MPPG Merchant Portal:** Portal for individual merchants to view transactions, and generate reports

- **Magensa Portal Service:** Merchant level API for reporting and real-time transaction information

- **Magensa Boarding Service:** Account Admin API for boarding merchants to MPPG

Magensa Decrypt & Forward (D&F)
D&F provides ISVs and developers with both power and flexibility via a wrapper service. This is how we solve many of our clients' most challenging business requirements.
Securely deliver payloads of any format to any destination
Use programming templates in XML/SOAP or JSON/REST to message, decrypt, manipulate, and insert data and forward to white-listed endpoint(s)

- No restriction to what can be done
- ISV and developer logic, with endpoint requirements, control the transaction
- D&F executes what it is instructed to do and has no sense of the transaction or operations being performed

Magensa TokenExchange
Magensa's TokenExchange web services enable ISVs and developers to protect and secure sensitive data and transactions using dynamically hardware-encrypted, vaultless or storage tokens. These tokens allow customers to retain control over their sensitive data in an anonymous, secure way. Magensa

TokenExchange offers a variety of token format types.

- **eCommerce Payment Tokens** contain encrypted PAN and expiration dates and are used for card-on-file, to support cross-merchant use, and facilitate secure transactions. Tokens are generated through Magensa TokenExchange client-side JavaScript.

- **Hosted Payment Page Transaction Tokens** encompass transaction data, merchant credentials, and branding elements initiated through a link or QR Code.

- **Customer Relationship Management Tokens** uniquely identify and associate physical or digital wallet cards for loyalty, rewards, and other CRM tools.

- **Personally Identifiable Information Tokens** store private information in an encrypted format.

- **One-Time-Use Tokens** guarantees uniqueness across customers and schemes, for one-use authentication.

Token Storage is available through the Magensa TokenHub to support Magensa TokenExchange requirements or special use cases including format preserving needs.

Magensa Remote Services
Magensa Remote Services enable field modifications of MagTek Dyna family products. This service provides organizations, especially with large and diverse deployments, with operational efficiency and technology obsolescence protection. Magensa Remote Services allow user to
- update firmware
- change configuration settings
- and load keys
Integration ready for ISV and developer applications using XML/SOAP or JSON/REST or initiated via a Magensa Remote Services application called MagTek Reader Configuration.

Data Protection
Magensa has protected hundreds of millions of records containing sensitive data throughout our history through dynamic encryption or our tokenization processes. Both technological approaches use a derived unique key for every transaction.

Key Management
Magensa expertly operates hardware security modules and provides key management as a service. Employing symmetric encryption technologies that include the 3DES and AES algorithms combined with derived unique key per transaction (DUKPT) methodology to provide the ultimate in security and quantum proof peace-of-mind. Magensa receives the encrypted payload and efficiently decrypts for subsequent processing.

MagTek Dyna Family - Secure Card Reader Authenticators
MagTek manufactures a family of secure card reader authenticators under the brand "Dyna," each injected with a unique encryption key and authenticated to Magensa services. MagTek card readers are available for desktop, mobile, and kiosks applications as well as integration modules. These readers are used to encrypt swiped, tapped, dipped, and keyed data or act as mini HSMs for encrypting data sent to the device programmatically. MagTek also provides a family of secure check scanners with integrated card readers that can be implemented into an application.