PRODUCT CAPABILITY GUIDE

American Express Contactless Payments

American Express Contactless Payments Help Enable Increased Convenience For Card Members At The Point Of Sale

American Express contactless payment technology (also known as proximity) enables card members and merchants to complete payments with added speed and convenience. American Express contactless payments are implemented primarily on cards may also be made available via other devices such as mobile phones, fobs and stickers.

American Express cards that contain an American Express contactlessenabled chip will typically have a magnetic stripe and EMV contact chip technology so the card can continue to be used in acceptance environments that have not migrated to contactless acceptance.

The American Express contactless specification is called Expresspay which ensures global interoperability of American Express contactless payment transactions regardless of where they are processed. Once Expresspay is enabled, contactless transactions can be initiated in both EMV and non-EMV markets.



The Customer & Merchant Experience











Step1

Customers look for the contactless identifier at checkout to indicate contactless acceptance.

Step 2

Customers tap their
American Express
contactless device in front
of the reader which uses
secure radio frequency
technology to transfer
transaction data.

Step 3

The terminal sends data for authorization processing. Then, the customers collect their purchases and go. If customers want a receipt, they can simply ask.





Build Business Momentum With Contactless Payments

Drawing on American Express' experience in digital commerce innovation, issuing and acquiring partners can take advantage of opportunities presented by contactless to grow revenue, drive top-of-wallet preference through an improved customer experience, and upgrading virtually seamlessly.

Grow Revenue

- Gain opportunities to partner with leaders in the digital space to help capitalize on digital commerce.
- Help grow your business by offering an expanded suite of products to merchants.
- Gain incremental revenue by promoting a technology that encourages card spending over cash.

Drive Top-Of-Wallet Preference

- · Enable consumer-preferred forms of payment.
- Ensure a secure shopping experience to gain card member trust and confidence.
- Understand customer purchasing behavior to provide relevant follow-up offers and ensure customer loyalty beyond the POS.
- Provide a more seamless and convenient customer experience by allowing card members to easily access instant credit, replace lost/stolen cards, etc.



1 million

Contactless transactions processed per day for transit provider, Transport for London in 2015¹



60%

Of transactions at UK supermarkets and grocery stores are contactless.²



51%

Of transactions in UK retail stores are contactless.²



60%

Of transactions at UK bars and restaurants are contactless.²

EXAMPLES OF MERCHANTS BEST SERVED BY CONTACTLESS + MOBILE TRANSIT CONVENIENCE ESSENTIALS ENTERTAINMENT Fast-food stations restaurants Supermarket **Taxicabs** Cinemas Bars & Pubs & Theaters Office supply Transit, Tolls & Parking **Book shops** Vending Specialty retail Parking Convenience meters stores Drug stores



How Contactless Payments Work

In order to use contactless payment technology, a card member simply places their contactless-enabled device in close proximity of the American Express contactless payments POS terminal.

Contactless POS transactions are processed via the acquirer and American Express network to the issuer, per standard transaction processing. The issuer will be able to identify contactless transactions through specific indicators in authorization and settlement messages.

Leverage The Benefits of EMV

American Express Contactless is designed to support two transaction modes both of which leverage chip technology.

- Expresspay EMV Mode Designed for those issuers and acquirers who support EMV data, the terminal sends all of
 the standard EMV data elements in the authorization and settlement messages, allowing use of EMV security
 features.
- Expresspay Magstripe Mode Designed for issuers and acquirers who do not accept EMV data, the terminal sends data for authorization and clearing submissions in a similar format as traditional magnetic stripe transactions. Importantly, the terminal and card interactions are still based on EMV, enabling some EMV security features to be utilized.

Expresspay card and terminal specifications mandate the support for magstripe mode to ensure interoperability and contactless acceptance globally. For more information on details on EMV security features, please see the EMV Product Capability guide or speak to your American Express representative.

Enabling Faster Transaction Speeds

American Express Contactless using the Expresspay specification has the flexibility to support faster transaction speeds through card member verification and transaction authorization modes.





Signature

CARDMEMBER VERIFICATION

Contactless transactions do not require a card member PIN or signature if the value is under their local market threshold, as indicated in the Business and Operational Policies (BOP) Manual.

The No Signature program provides increased convenience for low-value transactions for both the card member and merchant.



TRANSACTION AUTHORIZATION MODES

OFFLINE TRANSACTION (EMV mode only)

Contactless transactions can be approved either offline or online, this is dependent on the floor limit set in the terminal, the ability of the terminal to accept EMV contactless transactions and the outcome of decision making between the card and the terminal.

ONLINE TRANSACTION

The issuer is contacted during the authorization process, but the card is not present to process the authorization response. In this case, the terminal decides whether to accept the transaction, based on the response from the issuer.



Implementation & Investment Considerations

ISSUER Implementation

- Product development—design, development, testing and certification of card platforms
- Card production—manufacturing a magnetic stripe card or one containing an antenna, and then embedding a chip module in the card
- Data/systems preparation—developing crypto-graphic material for personalization. Updating host systems to process Expresspay transactions
- Card personalization—writing data onto magnetic strip, embossing, securely loading data into chip, and delivery of card to card member

Investment Components

- Chip procurement, card design, and personalization, card delivery to card member.
- Host systems development and data preparation
- Certification and testing
- Communications and training
- * Precise costs will depend on a number of factors

ACQUIRER Implementation

- Terminal hardware/software upgrades—deployment of terminal readers, implementation of Expresspay specifications
- Acquirer Network updates
- Merchant operations—updates to merchant billing systems, support of Expresspay disputes policy, merchant implementation incentives

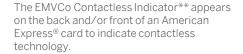
Investment Components

- Terminal hardware/software upgrades
- Certification
- · Communication and training
- Merchant operations—employee training, update fraud/risk management
- * Precise costs will depend on a number of factors

CONTACTLESS BRANDING CONSIDERATIONS

The EMVCo contactless symbol and indicator identifies contactless terminals and payment vehicles. These icons are now used worldwide to signal contactless payments and are easily recognized by consumers in regions where contactless payments have become common.

The EMVCo Contactless Symbol** should only appear on terminals with contactless capability





NETWORK DOCUMENTATION

The following documentation is posted to GNSWeb:

Business and Operational Policies

Ops & Tech > Policy > Business & Operational Policies > BOP

Network Specifications

Ops & Tech > Technical Documentation > Technical Message Specifications > **Network Specifications**

Expresspay Card Specifications

Ops & Tech > Technical Documentation > Expresspay > Expresspay Card > Specifications

Expresspay Terminal Specifications

Ops & Tech > Technical Documentation > Expresspay > Expresspay Terminal > Specifications

Expresspay Terminal Implementation Guide

Ops & Tech > Technical Documentation > Expresspay > Expresspay Terminal > Specifications

Issuer Chip Card Implementation Guide

Ops & Tech > Technical Documentation > EMV Chip > Chip Implementation Guides

Acquirer Chip Card Implementation Guide

Ops & Tech > Technical Documentation > EMV Chip > Chip Implementation Guides

Contactless Brand Guidelines

Marketings > Network Solutions > Contactless







Frequently Asked Questions

How long will it generally take for an issuer to launch a contactless product?

Migrating to contactless payments technology is a complex project that will impact issuing and acquiring infrastructures as well as back-end authorization systems. Specific information regarding adoption can be obtained by contacting your local American Express Global Network representative.

Are contactless card payments secure?

Yes. Contactless cards benefit from the same EMV security features found on a standard contact card. Occasionally contactless terminals will prompt the card member to perform a "Chip & PIN" transaction.

When a contactless transaction is run through a contactless-enabled reader and terminal, information is encrypted and sent to the host with the purchase details. The transaction is processed through the same secure networks as contact transactions; it is either validated by verifying the encrypted data, or rejected at POS if the transaction is fraudulent.

What is the difference between a contactless card and a contact chip card?

Contact EMVTM chip cards are either "Chip and PIN" or "Chip and Signature" cards. Both payment cards utilize microprocessor chips which securely store card data. The card is inserted into a terminal reader designed for smart cards. "Chip and PIN" cards requires the customer to enter a PIN for authorization at the point of sale similar to an ATM. For "Chip and Signature" cards, customers sign for the transaction as with magnetic stripe cards.

Contactless transactions are initiated when a contactless-enabled device is waved in front of a contactless reader at the point of sale. Account and security information is then sent wirelessly, using radio frequency, from the contactless device to the reader. Both contactless cards and contactless readers contain small antennae that allow data communication to take place.

If chip cards are more secure, why don't all cards have chips in them?

Moving to chip cards requires an investment in technology by both the issuer and the merchant. The move to chip cards has been evolving at a different pace throughout the world.

How do you recognize a contactless card from an EMV contact card, since they both may contain chips?

Contactless cards display the EMVCo Contactless Indicator wave symbol on the back and/or front of the card to indicate contactless technology. In most markets, the majority of contactless cards issuance will be dual-interface with both EMV contact-chip and contactless capability. Dual interface cards combine both technologies and can communicate either way (contact or contactless).

PRODUCT BENEFITS:

American Express Contactless Payments

Contactless payments enable the card and terminal to interact and complete a transaction without inserting the card into the terminal.

Expresspay* is an EMV-based payment specification that uses a contactless interface to communicate with a terminal

American Express contactless payments deliver benefits such as:

- Enables faster transactions leading to increased operational throughput
- Allows for different form factors e.g., fobs, mobile phones
- Reduces cash handling for merchants
- Increases convenience, making it easier to process a transaction

*For detailed information on Expresspay implementation, please consult the Acquirer Chip Card Implementation Guide and Issuer Chip Card Implementation Guide on GNSweb.



For more information, visit: www.amexglobalnetwork.com/contactless

Ask your American Express
Representative about contactless
payments and how they can help your
business.



Magnetic Stripe



Chip Card



Contactless



Mobile

