



# Mastercard® Biometric Card FAQ

## What is Mastercard Biometric Card?

Mastercard Biometric Card is an innovative, payment card technology that provides a secure and easy way for cardholders to authenticate themselves at the point-of-sale (POS) with fingerprint — as alternative to PIN or signature. Additionally, it works with current merchant point-of-sale terminals – no need for hardware or software upgrade.

## What are the potential benefits?

Providing this enhanced payment experience offers stakeholders the following potential benefits:

### For Issuers

- Added security at the point-of-sale for contactless transactions as it is a two-factor authentication and a way to avoid touching the terminal even for contact transactions
- Increased approvals—by reducing declines due to forgotten or mistaken PINs
- Reduced operational cost due to a reduction in customer service inquiries from erroneous security declines
- Differentiate card offerings by including innovative biometric technology

### For Cardholders

- Fast and easy payments—no need to enter PIN for high-value transactions
- An extra layer of security that can help address concerns about card or PIN theft
- Security of knowing that your issuer can confirm its you for every transaction, meaning greater confidence when using the card—especially when traveling
- Convenience via intuitive technology that aligns with existing biometric verification technology for digital payments

### For Merchants

- Easier check-out process over PIN—with no change needed to the POS
- Increased potential revenue from completed transactions

## For Governments and Social Welfare Agencies

- Verified “Proof of Identity” transaction processing can aid identification of benefit recipients
- Increased peace of mind for recipients—knowing they are protected by an additional layer of advanced security designed to prevent fraud
- Increased usage and financial inclusion, especially for those new to payment cards
- Greater adoption of card payments—which are safer and more efficient than cash

## How does it work?

Once enrolled, cardholders simply dip or tap their Biometric Card at a standard EMV POS terminal—holding their thumb on a sensor that is built right onto the card. Just as quickly as PIN, Biometric Card verifies the cardholder’s identity. If there is a successful biometric match, the cardholder is authenticated, and the issuer is notified via data in the authorization message.

## Is the fingerprint stored on the card?

There is NO fingerprint image stored on the card. There is a numerical representation (0s & 1s) of the fingerprint characteristics called a “fingerprint template” – this is stored on the chip within the card.

## How is the biometric data captured, stored, and accessed?

Mastercard Biometric Card captures and matches biometric fingerprint templates on the card without sharing any biometric data with the merchant. Upon enrollment, cards are customized with digital templates of one or both thumbs—which are securely stored in the card. Enrollment can be either self- managed (i.e., at home) via a disposable device sent to the cardholder—allowing cardholders the ability to easily and conveniently register their fingerprint onto the biometric card in the comfort of their home; or via a tablet at a supervised, in-person location selected by the issuer to activate the biometric feature on their card. For either option, the overall enrollment process is typically less than 5 minutes. There is no requirement for an issuer to store the biometric data and no fingerprints are stored in the cloud after enrollment.

At the POS, the fingerprint template that is captured by the sensor on the card is matched against the enrolled image. The enrolled fingerprint template cannot be changed or shared outside the card.

Unlike other solutions being developed in this space, the biometric template never leaves the card, is not shared with the merchant, and the biometric capture occurs on the card. This helps ensure the biometric data is never accessed or used outside of the card.

## In which markets is it available?

Mastercard Biometric Card is available across the globe in over 70 markets. Issuers must separately ensure their activity complies with local laws/ regulations. Please check with your Mastercard representative for a detailed list.



**For which types of cards is it available?**

Mastercard Biometric Card is available for Mastercard and Maestro brands, segments (i.e., consumer and commercial), and products (i.e., credit, debit, and prepaid). It is not available for any U.S. debit or pre-paid card nor for other similar regulated products supported in U.S. Territories.

**What will be the impact on terminals or merchants/acquirers?**

None. Mastercard Biometric Card works with current chip enabled points-of-sale (POS) terminals (i.e., no need for hardware or software upgrades).

**How is this innovative? Aren't there other biometric payment cards already on the market?**

Mastercard Biometric Card reflects the latest advancements in fingerprint and biometric technology—offering a fully functional card that can be used at any EMV terminal. Also, the cardholder's data never leaves the card and is not shared with the merchant. Mastercard is the first to specify a four layer functional, security and performance certification framework—that vendors need to satisfy in order to issue a biometric card.

**Can it be used at ATMs?**

Yes, the Biometric Card can be used at ATMs globally using a PIN.

**Is the biometric card ISO compliant?**

Yes, the Biometric Card meets all payment card standards and is ISO compliant.

**What are the implementation considerations for issuers (e.g., coding, system changes, etc.)?**

Issuers who already support M/chip Advance (which is the required chip for Biometric card) should integrate the biometric authentication values that will be available within the transaction data into their risk scoring models to authenticate and authorize a transaction.

Issuers will need to purchase cards from vendors/ card manufacturers having a product approved by Mastercard, and capture cardholder fingerprints with enrollment devices supplied by their card manufacturer. These vendors have demonstrated that their enrollment devices function successfully and have the proper algorithms required to transfer the fingerprint templates onto the Mastercard Biometric Card or initiate the enrollment sequence on the card itself.



For more information on Biometric Card, please contact your Mastercard representative or [biometric.card@mastercard.com](mailto:biometric.card@mastercard.com)

