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Increase in potential revenue

from reduced false declines or forgotten PINs



A simple and easy check-out process over PIN

Built-in innovation for enhanced authentication

The Mastercard Biometric Card provides a simple and secure way for cardholders to authenticate their identity for in-store purchases with their fingerprint, as an alternative to PIN or signature.

With this innovative technology, cardholder biometric data never leaves the card, and is not shared with the merchant. Biometric Card transactions are fast – since cardholders do not need to remember or enter their PIN during checkout.

It does not require changes to current EMV terminals and there is no need for hardware or software updates. You can expect to see this featured on any Mastercard card.

Cardholders will enjoy an easy and secure checkout experience, while merchants can have great certainty of genuine cardholder identity, and may see an increase in revenue from the reduction in false declines or forgotten PIN transactions.

How it works

Since the cardholder does not have to provide a PIN or signature, the Mastercard Biometric Card purchase is a simple and straight-forward transaction.



Step 1: A cardholder dips or taps* the card at a chip-enabled terminal – while holding their thumb onto the built-in sensor on the face of the card



Step 2: The cardholder's fingerprint image is compared against the stored biometric images within the card



Step 3: Issuer receives chip data which indicates whether the biometric authentication was successful or failed. If matching is not possible, the cardholder will be asked to enter an alternate cardholder verification method like PIN or signature which the merchant will handle as they do today

^{*}At the time of this document's release, Mastercard Biometric Cards are only available for contact payments.





Solution requires no

hardware or software changes



Everyone "wins"

from innovative security and greater usability

Usage at Point-of-Sale

Terminal Requirements

The solution requires no changes for acquirers or merchant hardware or software as it is compatible with any EMV-enabled terminal globally that has satisfactorily completed the Mastercard Terminal Integration Process (TIP).

For an optimal cardholder experience, merchant terminals should be:

- EMV-enabled
- · Customer-facing
- · Accessible to cardholders
- · Designed so that the card sensor is not blocked from use

Frequently Asked Questions

1. What data does the merchant see?

There is no biometric data transmitted to the merchant. The merchant's terminal receives the biometric authentication result data as part of the standard transaction data, which is then passed from the terminal to the acquirer, and then to the issuer.

2. Where in the payments process is this technology being used?

When a cardholder uses the card to pay in-store, the cardholder places the enrolled finger on the sensor while inserting/tapping the card into or on the terminal. The biometric authentication immediately follows.

3. What happens if there's a sweaty, dirty or greasy fingerprint? Is there a second presentment or option for Cardholder Verification Method [CVM]? Or is the transaction just declined?

Mastercard is setting up performance requirements and a testing framework which will work for different climates and environmental conditions. However, there are some technical limitations. If someone has a very greasy finger, the biometrics may not work and instead the card will fall back to a secondary CVM such as PIN or signature, set by the bank.

4. Who is liable for a chargeback?

The chargeback liability remains with the issuer if the biometric match is successful. If the biometric match is not successful, then the transaction will be processed using the highest priority CVM commonly supported by both the card and terminal, which may be PIN or signature. In that situation, standard chargeback rules will apply, which means the issuer retains liability for PIN-based transactions as well as for signature-based transaction if neither the card nor the terminal supports PIN.



5. What is the interchange rate on this type of card? How does the rate differ from PIN or signature?

You can expect the biometric authentication to be featured on any Mastercard card. Interchange remains as is for that card; this solution has no impact on the interchange rate.

For more information, contact your Mastercard Account Representative. or visit www.mastercard.com/biometriccard