Motion Code™

Bringing payment cards into the digital age to make online transactions safer



oday, we can see from the numbers that online shopping is increasing steadily year-on-year and it is estimated that nearly one in four retail sales will be online by 2022*. Card issuers can make sure online payments stay ahead by moving from static to dynamic CVV/CVC security codes.

Card-using customers reassured by card-based innovation

Many non tech-savvy customers are wary about downloading and using banking and payment apps. Such customers seek reassurance that the payment card they know and trust is continually updated with the latest technology that gives them maximum convenience and security – including for their online transactions.

A dynamic CVV/CVC to protect cardholders online

MOTION CODE™ is a groundbreaking payment card with an e-paper minidisplay for the CVV/CVC security code. Based on a cryptographic algorithm and a secret key, the card generates the dynamic CVV/CVC and automatically refreshes it.

This advanced tech has been designed specifically to seamlessly protect consumers in the fast-changing online payment world. It does not require cardholders to change their habits at all because there is nothing to learn and there are no further steps (such as downloading an app, a plug-in or keying in data). This means MOTION CODE™ has a 100% take-up rate.

This technology renders card cloning useless – by the time would-be fraudsters try to use a hacked CVV/CVC, it will already have changed.

Furthermore, MOTION CODE™ is accepted everywhere and changes nothing in the check-out process for online retailers or sellers.

Benefits



Attract New Customers

Acquire new customers who want innovative solutions without the hassle of installing and learning how to use new apps.



Increase Existing Customer Spending

Use MOTION CODE™ to increase your customers' online spend and ensure your card is always "top of wallet."



Retain Existing Customers

Replace cards that have been exposed to CNP fraud with a MOTION CODE™ card to regain customer confidence

Why IDEMIA?

IDEMIA is a global leader in financial services and delivered 800M payment products in 2020.

We have the flexibility of a local partner and will support you from 30+ personalization centers located throughout the world.

We have gained extensive experience from rolling out MOTION CODE $^{\text{TM}}$ technology worldwide.



^{*}Source:statista.com

MOTION CODE™ cards are synchronized with a dedicated MOTION CODE™ server.

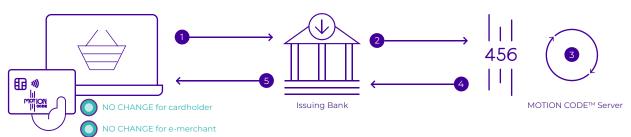
The MOTION CODE™ card's server is connected to the issuer's authorization server. It computes the CVV/CVC code using data transmitted within the transaction authorization request, mirroring the card's internal computation at a specific time.

If both security code values match, the transaction is accepted. The communication speed between both servers ensures a seamless cardholder experience.



Example

MOTION CODE™ SERVER



- Cardholder entering the card credentials (PAN, expiry date and dynamic CVC/CVV) on the e-merchant checkout page, these are processed as per any CNP transaction via the PSP through the acquiring bank and the network/scheme to the issuing bank's authorization server.
- The card is recognized as a MOTION CODETM card and as a result, the transaction authorization request is routed for validation towards the MOTION CODETM server.
- The dynamic CVC/CVV the cardholder submitted in step 1 is compared against the one that is calculated by the MOTION CODE™ server.
- Result (Valid/Invalid) is routed back to the issuing bank's server to complete the transaction.
- If the result is valid, the issuing bank's authorization is "processed back" via the network/scheme, the acquiring bank and the PSP to the e-merchant and the purchase is completed



Cutting-edge technology

- > Dual Interface EMV payment
- > ISO 7816 standard format
- > High-tech card containing several miniaturized electronic components (although the only one visible to the cardholder is the e-paper mini-screen)
- > Hardware robustness & reliability
- > Excellent CVV/CVC readability in any light

- > Permanent CVV/CVC display that refreshes automatically at regular intervals
- > Access to the latest available cryptographic algorithms to generate the CVV/CVC code
- > Optimized implementation of the algorithms



Also available

- > F.CODE: a card with a biometric reader where cardholders can authenticate transactions merely by touching the card's surface, eliminating the need for PIN codes
- > Smart Metal: a strong distinctive product portfolio with a large range of attractive and eye-catching metal payment cards.