

The ABCs of EMV Cards

Move over, magnetic stripe cards. EMV chip cards are becoming the new standard for [debit and credit cards](#). Here's what you need to know.

EMV basics

Financial institutions across the country, such as Greenfield Banking Company, are switching to EMV cards to combat cybercriminals who intercept card information (during in-person transactions) and make counterfeit cards. Although relatively new to the U.S., [EMV chips](#), invented in France in 1992, are in wide use abroad. The name EMV comes from the developers of this technology: Europay, MasterCard and Visa.

A microchip embedded in the card encrypts your account information to thwart hackers. Only data necessary to complete transactions is included; the chips don't store personal information or track your location.

EMV pros and cons

EMV chips significantly improve in-person card security because, unlike magnetic stripe cards, they can't be copied, or "skimmed," to manufacture counterfeit cards. Additionally, EMV chips generate a unique, non-reusable code with each transaction that is used to verify the card's authenticity. If account data were somehow stolen from an EMV card, any counterfeit cards produced would be missing the required transaction codes, leading them to be denied at the point of sale. EMV cards also offer travelers added convenience, as some 130 countries already use EMV chip technology.

While chip cards carry no major disadvantages, commercial card readers do take slightly longer to access information from chips than from magnetic stripes. It's important to understand, however, that although EMV cards decrease fraud risk in person, they don't improve security for online transactions. [EMV chip cards data](#) reviewed by NerdWallet points to the likelihood that online fraud will increase as hackers, finding that their traditional counterfeiting attempts no longer work, focus their efforts on stealing data online.

It's essential to [practice wise ID theft prevention habits](#) like changing passwords frequently, using only secure websites and networks, and not sharing sensitive information via email or social media if you bank or shop online. Be aware as well that physically stolen EMV cards can still be used successfully by thieves, so be sure to contact your provider immediately if you find your EMV card is missing.

Using EMV cards

Shopping with EMV cards is easy. Simply insert the card face-up into the EMV slot on the store card reader, with the metallic square that holds the chip pointed toward the machine. You'll then be prompted to either sign your name or enter a personal identification number to finalize the transaction.

The chip cards initially will have magnetic stripes as well, so you'll still be able to swipe at retailers that haven't yet upgraded to EMV-ready equipment. However, when you do use the magstripe method, you won't benefit from the additional security that the EMV chip offers.

Financial institutions are working hard toward the EMV conversion, so if you haven't already received your replacement debit and credit cards, they should arrive in the near future. Once the new cards are activated, you'll be able to enjoy improved security for all your in-person shopping experiences.

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