



EMV 101:

How EMV Technology Protects Gas Stations and Convenience Stores

What is EMV?

EMV stands for “Europay, MasterCard, and Visa”, the three companies that originally developed the payment technology. Today EMV is supported by these companies and others including Discover, American Express, and UnionPay, through an organization called EMVCo.

EMV strives to protect consumers against fraud by enforcing security controls during credit card transactions. Already proven successful in over 80 countries, EMV conversion is now required in the U.S. For many countries, EMV has led to dramatic reductions in fraudulent transactions, with record lows for both the U.K. and Canada.¹

What are the benefits of EMV?

The biggest benefit of EMV is the reduction in card-present fraud resulting from counterfeit, lost and stolen cards. EMV also provides integration with global payments infrastructure.

There are two primary controls that EMV provides: the electronic chip that is currently present in 70% of American consumer credit cards and a required validation measure, such as a pin number or signature. Consumers with EMV chip payment cards can use their card on any EMV-compatible payment terminal.

How do gas stations and c-stores become EMV compliant?

To become EMV compliant, retailers must complete:

1. **Inside-the-store EMV:** Chip-enabled card reader POS hardware and software updates *by October 2015* *
2. **Forecourt EMV:** Chip-enabled card readers on gas pumps, hardware and software updates, and in some cases, site communications infrastructure *by October 2020* **

* Many retailers do not have internal chip readers enabled yet because hardware and /or software has not been released for the site configuration. In these cases, the suppliers assume liability until the equipment is available.

** For many retailers, new pumps are needed. Retrofit kits are available for newer pumps. The estimated overall cost to all gas station and convenience stores nationwide is estimated at \$6 billion and a price tag as high as \$17,000 per pump, according to industry group Conexus.²

What is skimming?

Skimming is the theft of personal data, which is stolen from a debit or credit card magnetic strip via an electronic device. Virtually undetectable, the device can be used inside the store or on a gas pump. Data, including PIN numbers, can be stolen and used to create duplicate credit cards to make unauthorized purchases. If debit card information is stolen, duplicate cards can be used to make cash withdrawals from associated bank accounts.

How is a chip-enabled card different from a traditional credit card?

On traditional credit cards, data is stored on the magnetic stripe. When the card is swiped, the terminal reads the card information and sends it through a network to transfer money to the retailer. The number is the same for every transaction, making it relatively easy for criminals to steal.

EMV cards have the same magnetic strip, plus a microprocessor chip which generates a unique code for every transaction. Even if a criminal manages to steal the code, it won't work a second time and can't be traced back to your actual card number. This process makes it more difficult to counterfeit.³ NOTE: The only way the unique code is generated is when the chip is "dipped" in an EMV-compliant terminal, not swiped like a traditional credit card.

What is a fraud liability shift?

A fraud liability shift is the specific date when liability is passed from one party to another. In the case of EMV, it is when the liability will be passed from credit card companies to retailers if their pumps are not EMV compliant. NOTE: If the required hardware or software updates are not available, the supplier often steps in to assume liability.

Starting on October 1, 2020, retailers unable to process EMV cards at the pump will be liable for fraudulent transactions and could be hit with chargebacks.

Why should retailers care about EMV?

While the estimated cost might make the average retailer want to delay the update, there are many reasons customers should become EMV compliant as quickly as possible.

1. **Reputation** – When a retail site is skimmed, their reputation is affected. Victimized customers often blame the store and tell others, which can influence public perception. Just a few negative posts to social media could easily result in decreased customer traffic.
2. **Fraud and Theft** – Skimmers are aware of sites that make it easy to steal credit card information and they talk to other criminals. As more retailers convert, the window of opportunity gets smaller and sites that aren't compliant are targeted. In addition, dishonest consumers can take advantage of the system by denying transactions at non-compliant pumps or terminals, resulting in chargebacks.
3. **Service Backlogs and Increased Costs** – As we get closer to the 2020 deadline, there will be more demand to upgrade. Installation waiting lists will grow and create backlogs. In addition, conversions may become more expensive due to higher demand.
4. **Security** – Industry group Connexus estimates that gas stations account for about \$400 million of counterfeit fraud each year.⁴ Being "EMV-equipped" will become a valuable distinction for retailers who offer enhanced protective qualities.⁵

The earlier you can start protecting your business – and your customers – the better.



What is World Fuel Services offering its customers?

As America's largest superjobber, World Fuel Services has your back. We have leveraged our relationships with the two largest fuel dispenser manufacturers, Gilbarco and Wayne, to secure excellent, preferred pricing on EMV-compliant pump equipment for WFS customers. We also offer several attractive purchasing options to fit your needs.

Our EMV Compliant Solution:

- Saves you time, money, and headaches
- Enables you to meet the mandated October 2020 deadline for compliancy
- Helps you protect your business – and your customers' data

Convert now to take advantage of the best customer-only prices, currently available through December 31, 2017.

Information Sources

¹ "EMV: FAQ," Secure Technology Alliance, securetechalliance.org, June 24, 2011

² "Gas stations fight hackers—but they're going to have to pay for it," by Jon Marino, CNBC.com, August 26, 2016

³ "Everything You Should Know About the New EMV Chip Credit Card Payment System," by Kiona Smith-Strickland, Gizmodo.com, October 1, 2015

⁴ "EMV Migration Delay Doesn't Let Gas Stations Completely Off the Hook," by Maria Korolov, CSO.com, December 8, 2016

⁵ "Three Questions to Ask About EMV Compliance for C-Stores," by Christy Santy, Patriot Capital, April 6, 2015



Contact us today to get started.

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