





We Don't Just Adopt Standards, We Help Create Them. You probably know that we protect our customers by implementing the latest, most sophisticated security standards in all our devices and solutions. But, we do much more than that.

VeriFone was the first device manufacturer on the PCI Security Standards Council Board of Advisors, and we've been on the



Many payment providers talk about security. But with a constantly shifting security landscape, talking is simply not enough. At VeriFone – the global leader in payment security – transaction data protection is at the core of everything we do. Security is our first priority and our foremost commitment. It's never just added on – it's built into the very foundation of every product and solution we provide and every decision we make.

VeriFone is the first payment provider with a full family of payment devices certified under the next-generation PCI PTS 3.0 standard. We're leaders in providing end-to-end security for fast-growing mobile applications, from NFC-enabled solutions to multi-vendor digital wallets, and we have been preparing all of our hardware products for the rapidly approaching arrival of the EMV standard in the U.S. Add-in advanced end-to-end encryption (E2EE) plus tokenization and only VeriFone is prepared to meet the transaction data security needs of today and tomorrow for data in use, in transit and at rest.

At VeriFone, we intelligently integrate the highest level of security into absolutely every part of our business — to build a more Intelligent Checkout[™] and provide true protection.

board since its inception in 1997 – helping to create payment security standards followed by businesses everywhere. We're also a founding member of the Secure POS Vendor Alliance (SPVA), and we host one of the most well-attended security conferences in the payments industry.

In short, we don't just conform to payment industry security standards. We're at the forefront of creating policies and guidelines that secure vital cardholder and transaction data against theft and misuse.

A Multi-layered Approach To Locking Out The Latest Threats

Device Security

Mobile Payments
Security

Transaction Security

To provide complete protection against everexpanding threats, VeriFone has built a multi-layered framework that protects transaction data in three critical areas:

- DEVICE SECURITY VeriFone security solutions guard against physical attacks including forced disassembly of POS devices, as well as logical attacks that seek to compromise the operating system and other software through the download and installation of malicious code.
- → MOBILE PAYMENTS SECURITY This relatively new area is complicated by the fact that neither payment device manufacturers nor merchants can fully control the environment alone. To maintain strict compliance and the required interoperability standards, VeriFone works closely with both mobile device manufacturers and application developers.
- TRANSACTION SECURITY Transactions must be secured the instant payment information is read, whether via mag stripe, contactless or EMV smart card or NFC-enabled device. We implement multiple levels of protection along the entire transaction pathway, from merchant to ISO/processor and acquirer.

Superior transaction security cannot be achieved without all parts of the framework working together. Only VeriFone has the expertise, experience and industry relationships to successfully secure electronic payments.

Security redundance that's anything but.

Direct attacks on payment devices have become increasingly common and highly sophisticated. That's why VeriFone has long employed a combination of hardware (physical), software (logical) and standards-based (physical and logical) security solutions to ensure the highest levels of protection for our families of payment devices – and in the process not only meet, but also exceed PCI standards well into the future.



Device Security

Physical Security

The strongest security protocols in the world would be useless if the physical devices used on retail countertops, at patient check-in, on a fuel island or handed to a customer could be easily compromised. VeriFone devices take fraudsters head-on through the use of tamper-resistant security modules (TRSMs) and layers of physical security features designed to make it virtually impossible to gain access to encryption keys.

Among VeriFone's critical protections against physical intrusion are:

- Specially hardened cases with one-way screws, case gluing and security labels
- Tamper-responsive protections that sense a physical attack and actively work to protect encryption payloads
- Case open and keypad switches
- Temperature sensors
- Very little space to work in
- PCB grid with keypad traces that are hidden the instant data is entered

Logical Security

No provider builds in more effective logical security for payment devices and transactions than VeriFone. For payment transactions, VeriShield Total Protect, secured by RSA, offers unmatched end-to-end encryption and tokenization to protect sensitive cardholder data from card swipe to processing. To help merchants preserve their infrastructure investment on the payment device, VeriShield Retain stops roque or malicious applications from being downloaded to, and executed on, devices – not to mention preventing poaching of your estate by third parties.

In addition, VeriShield Remote Key enables businesses to efficiently and affordably download encryption keys remotely and securely, whenever and wherever needed, without the expense of shipping devices to a secure key-injection facility or the disruption of being without the devices for days or weeks.

Standards-Based Security

All of this helps us ensure that our devices meet PCI, EMV and Interac standards, as well as best practices established by the card associations – not just today, but also well into the next decade. VeriFone has the most PCI PED 2.0 and PCI PTS 3.0-certified and EMV-approved devices of any vendor. We are also the only payment provider to offer a complete line of PCI PTS 3.0-approved devices today – future-proofing your investment beyond 2020.



Mobile Payment Security

Payment in the Palm of your Hand

The smartphone has become the handiest tool in payment. With PAYware Mobile and PAYware Mobile Enterprise, smart devices allow any business, large or small, to securely handle more payments in more places with greater ease than ever.

PAYware Mobile and PAYware Mobile Enterprise are setting a new standard in mobile security. This was underscored by PCI QSA Coalfire, which determined that PAYware Mobile devices with VeriShield Total Protect are out of scope for PCI compliance – allowing merchants to reduce PCI scope and the overall cost of compliance.

In both PAYware Mobile and PAYware Mobile Enterprise devices:

- Data is instantly encrypted when a card is read, so the device never sees unencrypted data
- Transactions are secured on multiple levels with VeriShield Total Protect
- Follow-on transactions are performed using unique tokens, so primary account number (PAN) data is never exposed at rest

Plus, if a smartphone or PAYware Mobile device is ever lost or stolen, an account administrator can quickly and simply deactivate the device(s) from an authorized terminal.

Cutting the Strings from Wireless

Even traditional wireless is finding the freedom to grow and change. Whether accepting payment at a guest's table, identifying patients and streamlining the co-pay process in a hospital or physician's office or just simplifying bus and train ticketing – VeriFone provides builtin security for our wireless payment solutions that use Bluetooth, GPRS, CDMA or WiFi technologies.



But, new security solutions are required to ensure that payment transactions made with the touch of a smart device are well protected.

VeriFone is a key partner in numerous digital wallet introductions from major card brands, industry associations and Internet giants. Working closely

with our partners and retailers, we are innovating security solutions to ensure that NFC-enabled digital wallets will remain as secure as they are easy-to-use.

Ensuring The Most Trusted Electronic Payment Transactions

As the leader in electronic payment for more than 30 years, VeriFone has long been the acknowledged expert in transaction security. We don't simply offer an array of products to choose from. Rather, we provide comprehensive security solutions integrated from the ground up – based on VeriFone's VeriShield security suite, the industry's premier solution for protecting cardholder and transaction data.



PREPARING YOU FOR EMV.

In much of the world, EMV is now the global standard for interoperability and security for Chip and PIN transactions that use cards with embedded microchips. Recently,

Visa announced several milestones for the implementation of EMV in the U.S., which will accelerate the distribution of chip cards as well as the upgrade of ATMs and other transaction devices. EMV's adoption in the U.S. is no longer a matter of "if", but "how quickly".

As you might expect, VeriFone is leading the way in implementing EMV. We've worked hand-in-hand for years with EMVCo to design EMV-approved devices, and now we're working with merchants to meet Visa's new EMV requirements. No payment partner is more trusted or has more experience with EMV than VeriFone. EMV is coming soon and VeriFone is ready now.

Beyond Compliance

PCI compliance is a "must have" for today's merchants. But, PCI compliance does not equal true protection. History has taught us two things:

- Meeting the latest PCI compliance standards alone is not enough to secure sensitive information
- The required annual PCI assessments have placed an enormous burden on many retailers

Simply put, true security is difficult to achieve, and just attaining compliance – much less exceeding it – can be costly and complicated.

Transaction Security

That's why VeriFone doesn't seek to merely reach the next security mandate or milestone – we go beyond to offer true protection. Our product features work seamlessly together to deliver security from a variety of sources, not just those prescribed in the latest PCI compliance guidelines.

VeriShield Total Protect, the cutting edge security solution from VeriFone, protects merchants in two ways:

- Encryption By immediately encrypting cardholder data the moment payment information is read, sensitive customer information is never transmitted or stored in the clear in the merchant environment.
- Tokenization Post-authorization, VeriShield Total Protect relies on sophisticated card-based tokenization that substitutes random data (a token) for cardholder data, while preserving enough of the original transaction information to support additional services such as returned items, statements and analytics.

VeriShield Total Protect has also been proven to significantly reduce a retailer's PCI burden by removing devices from scope or lessening the requirements related to PCI assessments.

Overseeing all of this is VeriFone's Monitoring and Compliance system, which maintains a bird's-eye view over payment devices, providing real-time asset tracking, analysis of device activity and updates on each device's encryption performance at the individual transaction level.

The bottom line is that we do far more than simply react to the latest fraud schemes. With VeriFone transaction security solutions built in, we deliver true peace of mind.



A World Of Options. All Real-World Proven. Only VeriFone Delivers A Universal Standard For Built-In Security That Changes The Game.

Threats within the payment landscape continue to grow. Hackers and skimmers are becoming more sophisticated. The risk of a business-changing loss is real.

The only way to win is to rewrite the rules – create a universal security standard for electronic payments, such as the VeriShield security suite and build the world's best transaction security into every solution. That's precisely what we've done at VeriFone.

Relied on by more than a dozen major payment processors and retailers worldwide and protecting millions of payment devices around the globe, VeriShield has become, without question, the premier security solution for electronic transactions. With VeriShield and other security innovations integrated into our full line of hardware, software and solutions, no payment provider offers better protection for POS devices, transactions and the emerging world of mobile payments than VeriFone.

We've earned our position as the leader in electronic payment security through our unmatched expertise and experience – and we continue to expand our lead through innovations that come from our world-class labs as well as through our strategic partnerships with leaders in other areas of data security.

At VeriFone, security is tightly integrated into every part of our business. It's the first thing we think about when we start our day, and the last thing on our minds when we leave at night. When it comes to business-critical transaction security, only VeriFone offers true protection.

About VeriFone Systems, Inc. (www.verifone.com) VeriFone Systems, Inc. ("VeriFone") (NYSE: PAY) is the global leader in secure electronic payment solutions. VeriFone provides expertise, solutions and services that add value to the point of sale with merchant-operated, consumer-facing and self-service payment systems for the financial, retail, hospitality, petroleum, transit, government and healthcare vertical markets. VeriFone solutions are designed to meet the needs of merchants, processors and acquirers in developed and emerging economies worldwide.

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