

Best practices for in-store payment security:

A layered approach to protect every transaction

Why multilayered security works



Fraud is sophisticated: one weak link can compromise an entire system.

Each layer adds redundancy — hardware, encryption, monitoring, and authentication work together to prevent fraud.

Multi-layered protection reduces fraud costs, lowers PCI scope, and strengthens customer trust.

Verifone's 9-layer approach to in-store payment security

Layer 1:

Strong encryption



- Enciphers sensitive payment data both in transit and at rest, rendering sensitive data useless to attackers.
- Protects your business even if a breach occurs.

Layer 2:

Hardened POS devices and secure hardware



- Tamper-resistant terminals, anti-skimming technology, and secure elements block attacks at the source.
- Devices power down or alert the system when tampering is detected.

Layer 3:

Validated P2PE



- Validated Point-to-Point Encryption from terminal to processor eliminates cleartext gaps, reducing PCI DSS scope, and making card data impossible to exploit.

Layer 4:

Tokenization



- Replaces real card numbers with meaningless tokens, ensuring intercepted data has no value.
- Tokens secure reporting, loyalty programs, and back-office processes without exposing sensitive information.

Layer 5:

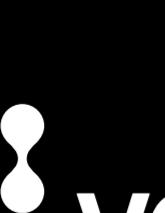
Trusted infrastructure and cryptography



- Secure servers, gateways, and cryptographic standards protect the entire payment ecosystem.

Layer 6:

Advanced detection and monitoring



- AI-driven fraud detection, real-time monitoring, and anomaly tracking identify suspicious behavior instantly — catching attacks before they escalate.

Layer 7:

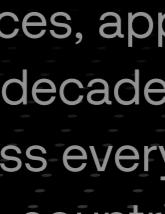
Authentication and identity verification



- Biometrics, multi-factor authentication, and device-based verification reduce chargebacks and fraud while keeping checkout fast and streamlined.

Layer 8:

SoftPOS solutions



- Flexible, software-based POS solutions on mobile devices provide the convenience of modern payments while maintaining enterprise-level security, compliant with PCI MPoC standards.

Layer 9:

Secure key management

- Remote, automated key management ensures encryption remains current and compliant — forming the secure foundation for every other layer.

Verifone delivers a secure, omnichannel payment ecosystem that protects every transaction today and prepares your business for tomorrow.

Learn more about Verifone