

### Join the Migration to EMV

The spiraling rates of credit card fraud have prompted three of the major payment card companies – Europay, Mastercard and Visa – to issue a joint secured protocol for credit card transactions, which uses a smart chip instead of a magnetic stripe on the card. With **PrivateServer/EMV**, you can now upgrade your card-issuing and card-processing centers to fully comply with the new EMV protocol. **PrivateServer/EMV** is not only cost-effective and reliable, but also maintains the highest level of security for this complex protocol.

### Issuing New EMV Cards

One difference in the EMV standard is the need to digitally sign the unique information embedded in each card. **PrivateServer/EMV** is a high-performance Hardware Security Module (HSM) that efficiently meets this requirement, making it simple for you to issue EMV credit cards. This AR product integrates with both the old and new issuing systems – legacy magnetic stripe cards and EMV cards – to ensure smooth migration in the issuing process, together with a full **Personalization Preparation Process (PPP)** system.

### Payment Card Processing

**PrivateServer/EMV** works in tandem with most EFT/POS and ATM Management solutions for easy deployment in the payment card processing centers. The HSM acts as a fast PIN-Verification system, which will support both legacy standards for magnetic stripe cards and the new EMV protocol, offering full dual capability for PIN and transaction verification.



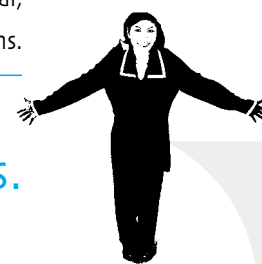
## Highlights of the PrivateServer/EMV Solution

- Cost-effective and fast**  
 One of the remarkable features of **PrivateServer/EMV** is its speed: the capacity to perform over 1,200 PIN verification transactions per second, and 150 RSA signatures per second. As a result, fewer HSMs are needed at the card-issuing center and at the transaction-processing center. **PrivateServer/EMV** means greater efficiency in managing all facets of EMV – all of which translates into company profits.
- Networking capability**  
**PrivateServer/EMV** is a network-attached solution supporting major network interfaces. The interface makes PrivateServer simple to manage, and offers an efficient way to share its HSM resources between the issuing center and the processing center.
- Flexible integration**  
**PrivateServer/EMV** is designed to integrate with the most widely used market applications. And in the case of unique integration requirements, our solution comes with a user-friendly API, which can be used to develop custom-tailored interfaces with **PrivateServer**.
- Upgradable**  
**PrivateServer/EMV** is able to load external software modules into the HSM guaranteeing success in any future upgrades, an added value as new features and protocols are developed.

## Top-Flight Security

**PrivateServer/EMV** was validated by the National Institute of Standards and Technology (NIST) as a FIPS 140-1 Level 3 security product. This strict standard provides the utmost in security for all your financial transactions.

Algorithmic Research (AR) specializes in innovative digital signature applications based on state-of-the-art cryptographic technologies. AR products include business applications, solutions for financial markets and security products that are designed using our patented technologies and enjoy international recognition for their superiority and cost-effectiveness. Companies worldwide that depend on secured transactions and paperless applications, including those in the financial, healthcare and governmental sectors, depend on AR's expertise in creating innovative solutions.



With PrivateServer, EMV becomes effortless.  
It's simple. It's from AR.

**Ar**

Algorithmic Research

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