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**➤ Host Security Module  
HSM 8000**

Securing payment transactions

## >> Trusted and reliable security

Being in the payment card industry, you face the challenges of increasing transaction volumes, handling new technologies such as smart cards and contactless cards, and providing new services for competitive advantage. You also need to defeat constantly emerging security threats. And your solutions must incorporate cryptographic security that meets industry mandates and is able to grow and adapt to meet your emerging needs.

The HSM 8000, the latest Host Security Module (HSM) from Thales, meets these challenges. Its software options address the needs of banks validating cards, card scheme and national payment networks, third-party merchant acquirers, transaction routing, authorisation services, and card issuers. The core security component of the HSM 8000, which delivers the critical security functionality, has been independently certified to Level 3 of the FIPS 140-2 standard - the key certification for cryptographic modules which is essential to meet card association requirements. The HSM 8000 is fully backward compatible with the RG7000 series which it replaces.

### The proof is in success

The HSM 8000 is used for card transactions in all major card scheme operated organisations such as Visa, MasterCard and American Express - and it is estimated that 70% of the world's payment transactions are processed by Thales HSMs.

### Built for payment processing and card issuing

The HSM 8000 is one of the few HSMs designed specifically for payments processing card issuing. It has the functionality and certifications needed for this market without the additional cost and overhead of other irrelevant capabilities. The HSM 8000 works with all major banking sector payment authorisation and transaction switching applications.

### Providing exactly what you need

The HSM 8000 family offers a range of performance models and ever-expanding functionality options, enabling you to match your investment to your needs. Thales has an unparalleled record of customising functionality to meet the specific needs of its individual users. Additional power and functionality can be added in situ to meet your evolving requirements.

The HSM 8000 will interoperate with whatever computer technology you are using to provide the payment processing solution.

### Secure security

Whilst the purpose of an HSM is to secure payments transactions and processes, the HSM itself must be secured against assault. The FIPS 140-2 certification demands the tamper resistance of the HSM 8000 core security "engine". However, Thales has done more to protect its HSMs by offering capabilities such as dual physical locks, two-factor authentication of operators and detectors to react to physical attacks on the outer casing. The HSM 8000 can be further secured by blocking the use of inappropriate functionality by your host applications.

### Have confidence in your supplier

HSMs are mission-critical components of your payments processing solution so having confidence in your supplier is vital. Thales has the longest history of developing HSMs, building on the first ever HSMs used by Visa some 25 years ago. By choosing an HSM from Thales you are investing in a world leader in credit/debit card transactions whose products process 70% of all ATM/EFTPoS transactions.

Thales is a Fortune 500 company with the resources to provide a continuing roadmap, bespoke customisation, and global network of local partners to provide you with expert support wherever you are.

For further information such as technical datasheets and application notes, please visit [thalesgroup.com/InfoSysSecurity](http://thalesgroup.com/InfoSysSecurity) or call +44 (0) 1844 201 800.