



PURE by Gemalto

Extensive EMV™ and mobile NFC payments for national schemes

PURE is an interoperable and fully EMV-compliant white-label payment application that puts domestic schemes in full control. PURE gives domestic schemes full ownership of their payment solution, including product lifecycle, roadmap and certification rules, allowing them to articulate their own business model

In 2013, more than 90%* of payment transactions were domestic while domestic schemes mostly remain the preferred solution for in-country payments. However, a competitive market is encouraging national schemes to adopt a more commercial approach to business models, brand recognition strategy and payment instruments. They want to adopt high-level technological solutions to guarantee the efficiency and interoperability of their payment methods and infrastructure.

Within this context, domestic schemes have to persuade issuers to switch to their brands and address the needs of newcomers such as government services or fuel retailers, who want to offer innovative payment solutions to their customers.

Gemalto PURE

PURE is a unique solution that is quick and easy to deploy for a scalable and cost-effective domestic payment scheme giving access to advanced modes of payment while keeping full control of the payment ecosystem.

Fully EMV™ compliant for security and interoperability

PURE is fully EMV-compliant, so you can leverage all the benefits offered by EMV technology today. PURE products have passed EMV Co. certifications, guaranteeing the greater security, more interoperability and reduced fraud related costs offered by Chip & PIN technology. There is no need to invest in a custom payment specification or a custom certification process. PURE is compatible with any EMV-compliant terminal and back-end system (POS or ATM), minimizing impact on infrastructure for maximum cost effectiveness and easy deployment.

* National Payments Schemes : Drivers of Economic and Social Benefits, Anthemis Group, 2014

A complete suite of specifications and related products, solutions and issuance services

PURE solutions are fully complementary thus ensuring fast time to market. PURE provides a complete suite of specifications for schemes, and offers issuers the necessary corresponding products, solutions and issuance services.

> PURE specifications and software

A suite of sustainable and comprehensive specifications open to the industry:

- PURE contact and contactless specifications
- PURE mobile NFC specifications covering embedded secure element, HCE and SIM
- PURE contactless terminal kernel
- Security and functional test plans
- Consulting services by EMV experts

> PURE products, solutions and services

Corresponding products and solutions for issuers, offering fast time to market and rapid deployment

- PURE contact and contactless cards
- New form factors (stickers and wearables)
- Mobile application
- Perso services
- Issuance solutions
- Token and platform management for mobile payment

Gemalto has developed a set of specifications for mobile NFC payments that are compatible with secure elements and HCE. PURE specifications enable issuers to support all possible online and offline transactions scenarios that can be performed with an EMV payment card and mobile NFC

Future-proof

payment application for prepaid, debit, credit, and ATM transactions



Enabling contact, contactless and mobile payment

Fully compliant with EMV standards



For security and interoperability with EMV terminals

Brand independant solution

BRAND

Business model autonomy and control over the customer experience

PURE is a field-proven solution

PURE is a fully field-proven solution with more than 60 million cards in circulation around the world.

PURE is open to third-party card providers

PURE is independent of any chip operating system and runs on native, Java, and MULTOS. It is compatible with industry standards for both personalization (CPS) and authorization (EMV CCD).

In addition, issuers can source numerous card products from certified local and global card vendors. More than half of the PURE cards issued are produced by third parties. Card personalization services are also available from multiple bureaus and vendor-service partners.

PURE simplifies cobranding with international brands

PURE can coexist on a single chip alongside other international payment applications (such as Visa, MasterCard and Amex) and proprietary applications (including CEPAS and MPCOS). A mechanism can be configured to trigger the right application depending on the territory of acceptance.

A powerful set of features and applications:

- > PURE supports multiple card verification methods such as online and offline PIN, signature, and mobile CVM. There is data storage within the payment transaction for loyalty or transport applications, including reward schemes or proof of ticket purchase
- > Online CAP & PKI applications (IAS v3) available
- > Match-on-card biometrics available

Why Gemalto

Gemalto provides an extensive suite of complementary solutions that address the needs of all stakeholders in the ecosystem thanks to its strong relationships with certification tool providers, terminal vendors and personalization bureaus worldwide.

Dedicated consulting services to accompany you and your team all the way

Gemalto's dedicated team of senior consultants can help smooth migration from any magstripe or chip technology to PURE.

This service is fundamental for domestic schemes running PURE projects. In terms of definition and implementation, it brings greater visibility regarding the scope of the solution, the impact of different implementation options, and helps secure project planning and risk minimization.

Integrating PURE solutions in the payment ecosystem

EMV compatibility already enables full interoperability with all terminals for contact cards, and to cover access to contactless payment, Gemalto has specified a PURE contactless reader that can be integrated into an EMV contactless terminal. The world's leading terminal vendors, including Ingenico and Verifone, have already implemented the PURE contactless kernel and it has successfully passed the testing requirements of accredited laboratories.

A complete PURE offer to enable scheme certification and approval

Gemalto has worked with leading EMV laboratories to assess the functionalities and security of PURE products, dual-interface cards and the dedicated PURE contactless reader. The test suite and services that have been developed to help card and terminal vendors validate their products for level 1, level 2, or level 3 certification, depending on the requirements of the scheme.

Additional characteristics of the PURE application

- > Available on a variety of card operating systems (Java, native, and MULTOS)
- > Supports SDA, DDA, and CDA
- > Supports contactless for fast domestic debit transactions and transport
- > NFC-compatible (SIM-based, embedded secure element-based, or HCE)
- > From 8K to 72K
- > Available with MIFARE and DESfire emulation
- > Can be combined with innovative card bodies
- > Complies with the CPS personalization standard

About Gemalto

Gemalto is the world leader in digital security, with 2018 annual revenues of €3 billion and blue-chip customers in over 180 countries. Gemalto helps people trust one another in an increasingly connected digital world. Gemalto's unique technology portfolio - from advanced cryptographic software embedded in a variety of familiar objects, to highly robust and scalable back-office platforms for authentication, encryption and digital credential management - is delivered by our world-class service teams. Our 15,000 employees operate out of 110 offices, 47 personalization and data centers, and 35 research and software development centers located in 47 countries.

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