Optelio Contactless R7 for Santander Data Sheet
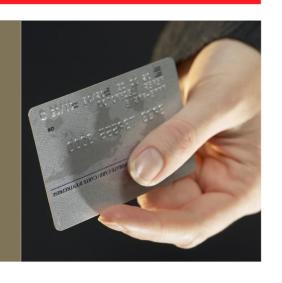
FINANCIAL SERVICES & RETAIL>PRODUCT RANGE

ENTERPRISE

INTERNET CONTENT PROVIDERS

PUBLIC SECTOR & TRANSPORT

TELECOMMUNICATIONS

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Marketing Product Name	
Product name	**Optelio Contactless R7 Santander**
Product Status	**Product in certification – samples R&D available (limited qty)**
Card characteristics	
JavaCard / Global Platform	JavaCard2.2.2 / GP 2.1.1
User memory (EEPROM)	Up to 72KB for standard applications Will be limited to 45 kB when M/Chip Advance is installed
Contact Interface	
Protocol	T=0 (ISO7816)
Contactless Interface	
Standard Compliance	**Type A** : T=CL & Mifare 4K emulation & Desfire EV 1 4K emulation
Baud Rate	106 kbauds/s
Antenna	**FULL Size Antenna**
Cryptography	
Secure Messaging	Card Manager configured with SCP02 (i=55)
Supported cryptography	- DES/ 3DES - RSA (card supports up to 2048bits in CRT) - Actual max key length depends on each EMV application) - AES: 128,192 and 256 bytes - SHA1 - SHA256
Applications	
EMV applications *(only 1 application to be selected)*	***M/Chip Paypass v2E***: compliant *Paypass M/Chip 4 v1.3.1* ***VSDC281f1:*** compliant *VIS1.5.3/VCPS2. + Prepaid v1.1 spec* ***M/Chip Advance v1.1***
Other applications	MPCOS v4.1 WG10 IAS Classic V4.0.2c - Digital Signature and Authentication Dual PSE 1.2
Mifare	Mifare 4K available – option to support Desfire EV1 4K simultaneously - UID : 7 bytes or 4 bytes NUID (derived from 7 bytes)
Multi-instantiation of applets	Yes supported ((please verify with your Gemalto Technical Consultant exact perso profile configuration versus chip size limits of RAM and EEPROM)
Certification	
MASTERCARD	PayPass M/Chip4 – planned for Sept '14 M/chip Advance v1.1 – planned for Jan'15
VISA	VSDC2.8.f1 planned for Nov '14
Digital Signature Common Criteria	IAS Classic v4.0.2c - PPSSCD KI&KG – planned for end 2014
ICP Brazil	IAS Classic v4.0.2c – ICP certified for Q2 2015
Samples	
Commercial samples	Samples R&D Available for now Final samples to be ready end of July

Card Body	
Type	Dual Interface
Standard compliance	ISO 14443-1 compliant
Material	Banking grade PVC with overlay for post personalization
Technology	Hot lamination
Magnetic Stripe	ISO 7816 –4, -5 compliant

Application Details	
Default applications	
M/Chip Paypass	Applet based on version of the MASTERCARD Paypass M/Chip specifications V1.3. Will be fully backward compatible vs Santander R5 product (no CPV required when migrating from R5 – only CNS has to be applied)
VSDC281f1	Latest applet from VISA released in February 2014 Compliant with VIS1.5.3 and VCPS2.1.1. It includes VSDC, qVSDC and MSD paths.
IAS Classic v4.2	This applet can be used for strong authentication, digital signatures and encryption, and storing digital certificates. The authentication and signature scheme used by the applet is based on E-Sign standard. The applet is compliant with PKCS#15 and all PKI applications that are following the PKCS#11 APIs and/or Microsoft CAPI can use the Classic IAS applet. IDGo 800 middleware has to be used – it is fully backward compatible with previous version IDGo 300. This applet operates now both in contact & contactless mode.
WG10	Gemalto will use the standard WG10 applet already used by Banco Santander
Mifare Classic /Desfire EV1	On this new generation, Mifare 4K and/or Desfire EV1 4K can be enabled during Pre personalization. it must be noted that both options can be activated at the same time to ensure maximum compatibility with Access and transport systems (test to be performed on each infrastructure)
Mifare Access applet (Version TBD)	Still TBD
Options	
M/chip Advance v1.1	Dual Interface application including advanced Card Risk management parameters as well as Datastorage option (loyalty ID, Specific Transit application based on Open Loop payment), etc...)
Third party applets	HID SeOS – to be validated Legic - to be validated
Personnalization	
CPS is available for all payment applications perso CPS = Common Personalization Specification is a standard defined by EMV Co., and endorsed by Visa, Mastercard and JCB.	

Changes are periodically added to the information herein. Furthermore, Gemalto reserves the right to make any change or improvement in the specifications data, information, and the like described herein, at any time.

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