BARNES INTERNATIONAL

# EMV Personalisation Validation Tool

CPT 3000v3

Speeds up development and payment scheme certification, and enables quality control for issuing valid EMV cards

To achieve payment scheme certification, card issuers must ensure their cards comply with their chosen payment scheme's personalisation requirements. To prevent the costly production of invalid EMV cards and delays in the formal card personalisation process required by the payment schemes, the Barnes EMV Personalisation Validation Tool enables issuers to validate and pre-certify their cards against the latest payment scheme requirements, as well as their own business requirements.

SUPPORTED PAYMENT SCHEMES INCLUDE:

EMV
EMVCo L3

ABI
American Express
ATH
BKM Troy
Cartes Bancaire
CPA
Credibanco
Discover D-PAS
eftpos
Interac
JCB
JetCo
mada
Mastercard
MCCS
NCCS
NETS
NSICCS
PBOC
Pure
RuPay
UnionPay
Visa
SERMEPA Advantis
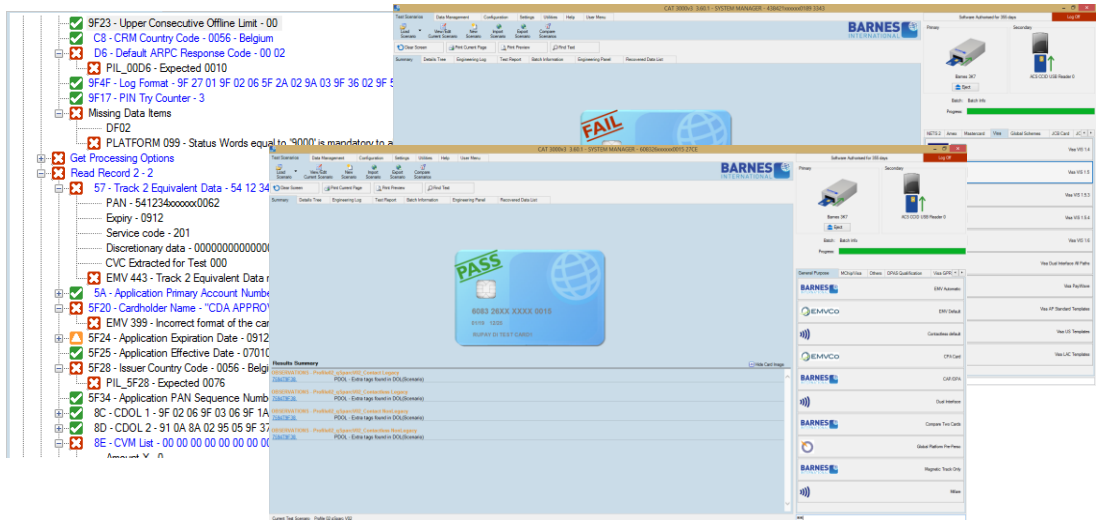
Solution Highlights

☐ Quickly tests that data on the chip and magnetic stripe are correct and valid according to issuer profiles and all major payment scheme specifications.

☐ Supports all payment devices: contact and contactless cards, mobile phones, tokens.

☐ Developed in collaboration with Visa and Mastercard, and used by Visa, Mastercard, American Express, Discover, JCB, major banks and card bureaus globally.

☐ Essential in all EMV chip card issuing, personalisation, implementation and support operations.

Motorised reader for contact chip and magstripe

CPT 3000v3CL
Contactless option
Various reader types supported, reading cards and phones with a financial application.

Features and Benefits

Multiple Application Tests

In a single card insertion, the tool confirms the data on the chip and magnetic stripe is correct and valid according to the issuer profile. The card account number and issue / expiry dates are displayed for visual verification of the card embossing indent print. Optionally, the card livery can be displayed to verify the correct card stock has been used.

Multi-level User Interface

The tool is designed to be easy to use for both the non-technical operator and at the same time provides detailed technical information for IT and engineering staff. Production control features include User Access Control, Batch Test and Event Logging, which are supplemented with intuitive data element displays for problem solving and data analysis.

Powerful Diagnostic Tools

Data displays include Card Test Result Summary; Detailed Test Result Tree and Full Engineering Log. Hyperlinks between the various levels of displays and directly to the EMV and payment scheme specification references allow the user to quickly identify and diagnose problems.

PCI Security

PCI compliant masking, log-out and user controls enable full control of personal cardholder data on screen and in reports.

Adaptable Test Scenarios and Scripts

Users can easily define "QuickTest" profiles to test their own chip data requirements, in line with, or in place of, payment scheme requirements. Test scripts are not restricted to EMV; other types of smart card application can also be tested, for example payment, security and loyalty applications.

Cryptographic Authentication

Static (SDA), Dynamic (DDA) and Combined (CDA) data authentication is fully supported by the tool. RSA algorithms are also supported.

Key Management

Complete with a comprehensive set of Visa, Mastercard, JCB and Discover public keys. Additional keys can be imported through a key management system.

Network Capability

The tool can be used in a networked environment with individualised user access levels and settings. All test scripts, scenarios, standard profiles, public keys and reporting for multiple tools can be managed centrally, ensuring consistency across all units.

Remote Testing

Issuers and scheme authorities can securely evaluate and approve cards remotely, eliminating the costs and delays of sending sample cards around the world.

THE BARNES ADVANTAGE

Barnes is the chosen test tool of Banks & Issuers, Card Manufacturers, Personalisation Bureaus and Test Laboratories worldwide.

Here are some reasons why:

BUSINESS AGILITY

Barnes test tools are easy to use by both technical and non-technical users, and speed up card development and payment scheme certification.

COST ELIMINATION

The high business costs and wasted resources of producing and issuing invalid cards are eliminated.

RISK REDUCTION

The reputational risk of issuing invalid EMV cards to end customers is reduced.

FUTURE PROOFED

Barnes works in partnership with all major payment schemes. As scheme rules evolve, Barnes rapidly make updated test script packs available to customers via the Barnes website.

SERVICE EXCELLENCE

Our clients have every confidence that whatever their test requirement, the Barnes team is always on-hand to deliver expert advice and fast support.

Optional Solutions

EMV PVT for Mobile - CPT 3000v3ML

Validates mobile payment data over NFC plus SWP interfaces.

EMV PVT for Contactless - CPT 3000v3CL

Validates contactless cards and ensures that dual interface cards deliver consistent information over both interfaces.

Host Simulation Module

Adds the ability to verify secret keys either in software or with the optional Hardware Security Module connectivity.

Payment Scheme Certification Test Modules

Allow certification tests to be performed to accelerate payment scheme approval.

- Mastercard CPV
- Visa GPR
- eftpos CPC
- NETS
- JCB
- Discover D-PAS CPV
- RuPay
- GIE CB
- eftpos

Technical Specification

Software:

- OS: Windows Vista, Windows 7, 8 and 10 (32-bit and 64-bit), Linux VM, Apple Parallels

Card Reader:

- Barnes 3K7 Triple Interface reader (contact only mode)
- Alternative manual reader is available for reading metal / titanium cards.
- PC/SC reader compatible

For CPT 3000v3 CL

- Contactless card and NFC reader options
- Barnes 3K7 Triple Interface reader (Magnetic Stripe, Contact and Contactless chip)

For CPT 3000v3 ML

- SWP reader