

SUPPORTED PAYMENT **SCHEMES INCLUDE:** 

EMV

ABI

ATH

CPA

**BKM** Troy

Credibanco

mada/SPAN Mastercard

NETS NSICCS PBOC

RuPay UnionPay Visa

SERMEPA Advantis

mastercard

MERICAN

DISCOVER

DIPRESS

**ISA** 

American Express

Cartes Bancaire

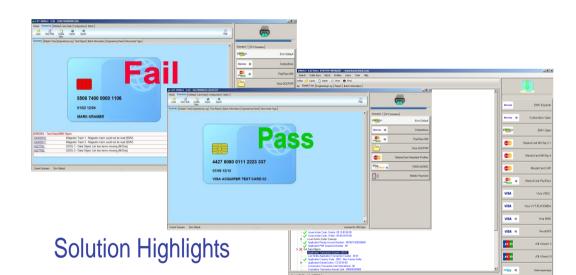
Discover D-PAS eftpos Interac ICB JetCo

# **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.



- 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 bureaux globally.
  - 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.



Essential in all EMV chip card issuing, 



THE BARNES ADVANTAGE

Barnes is the chosen test tool of

Banks & Issuers, Card

Manufacturers, Personalisation

**Bureaux and Test Laboratories** 

Barnes test tools are easy to use

by both technical and non-

technical users, and speed up card

The high business costs and

wasted resources of producing

and issuing invalid cards are

The reputational risk of issuing

invalid EMV cards to end

Barnes works in partnership with

all major payment schemes. As

scheme rules evolve, Barnes

rapidly makes updated test script

packs available to customers via

Our clients have every confidence

whatever their

requirement, the Barnes team is

always on-hand to deliver expert

test

SERVICE EXCELLENCE

advice and fast support.

payment

Here are some reasons why:

**BUSINESS AGILITY** 

development and

scheme certification.

eliminated.

COST ELIMINATION

**RISK REDUCTION** 

customers is reduced.

**FUTURE PROOFED** 

the Barnes website.

that

worldwide.

# 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.

### **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

#### 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.

## **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