

BARNES INTERNATIONAL

CAT 3000V3

Contact & Contactless SmartCard EMV PVT PLUS Test & Script Developer tools

A cost effective, flexible and powerful script driven test development environment for Contact and Contactless ICC applications (EMV; GSM; etc).

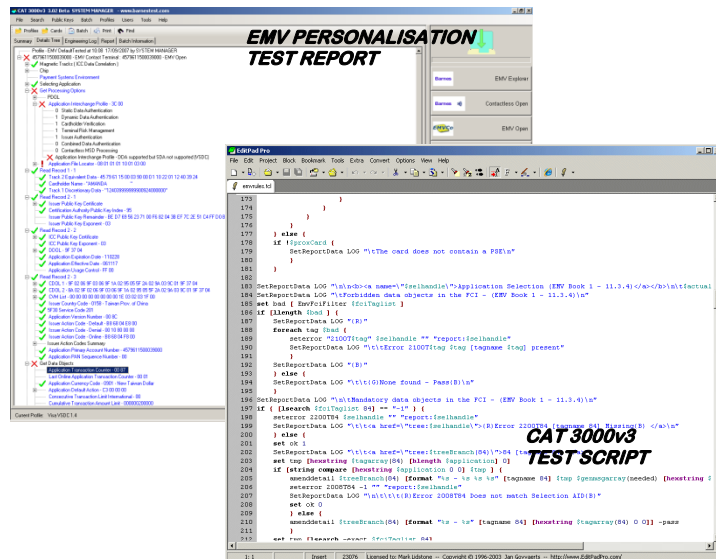
The CAT 3000v3 provides a comprehensive test script development capability for users of Barnes CPT 3000v3 EMV Personalisation Validation Test tools; it also includes all the features of these test tools (see CPT 3000v3 datasheet) – including the full CPT 3000v3 EMV test scripts. CAT 3000v3 users can easily and rapidly develop and implement test suites for a wide variety of chip card applications. The script based test suites may be run in isolation or linked together in sequences to fully test multi-application cards. The standard hybrid card reader provides access to the magnetic stripe data as well as the chip data. Host Simulation card testing module and Hardware Security Module (HSM) interface for testing cards with live keys. Optional Contactless card test module may be added for Contactless tests and test script development.



MOTORIZED READER- CONTACT CHIP + MAGSTRIPE



CPT 3000v3CL CONTACTLESS READER MODULE – (Option of OTI, VIVOpay, etc.)



- In use by payment scheme operators, IC card issuers and personalisers worldwide.
- Fully flexible and programmable, using the widely supported TCL scripting language.
- All card functions, APDUs and responses, cryptographic functions, results displays and comprehensive reports are under script developer control.
- Level 2 Certification tests may be run during a single card insertion by linking Application test cases, created in accordance with the relevant Application specifications.
- Multi-application tests – e.g. EMV, GSM, Loyalty, E-Security etc- can be implemented during a single card insertion (including magnetic stripe data).
- Motorised chip/mag-stripe reader and EMV payment test suites are included; a Contactless Card Test module option and an optional PC/SC reader interface are available. Memory Chip Card Support.
- Single Step Engineering Mode for detailed transaction analysis.
- PCI DSS and PA-DSS compliant security.



CAT 3000v3 Personalisation Validation Test Script Development Tool

Barnes International Ltd developed the CAT 3000v3 to provide a powerful and flexible Level 2 Contact and Contactless ICC Application test development environment for chip card developers, manufacturers and issuers in Payment (EMV), Mobile Communications (GSM/3G), etc. The CAT 3000v3 provides a comprehensive test script development capability for users of Barnes CPT 3000v3 EMV Personalisation Validation Test tools; it also includes all the features of these test tools.

CAT 3000v3 can be installed on any computer running Windows XP, Vista or Windows 7 32-bit, it requires one free USB or serial port. Full scripting development facilities, plus an EMV payment script test suite are included as standard. The standard CAT 3000v3 includes a motorised card reader (chip and magnetic stripe) and is supplied complete with USB connecting cable and mains power adapter. A serial COM port version is available for those organisations who prefer not to use USB. **Optional Contactless card reader (ISO 14443 types A & B)** is available for developing and testing contactless card applications (eg Visa payWave and MasterCard PayPass™). With this option (i.e. **CAT 3000v3CL**) any or all of the Mag-Stripe, Contact and Contactless Chip personalisation data can be validated during a single test (reader requires an additional free USB or serial port). Also optionally available is an interface allowing the connection of any PC/SC compatible reader.

CAT 3000v3 is controlled via an intuitive and friendly user interface. All the capabilities of the CPT 3000v3 EMV PVT are included as standard (please see the CPT 3000v3 datasheet). Test scripts and test Profiles are selected from the database using clear and concise dialog boxes. Test results are viewed in a range of modes including a simple pass/fail indicator, an explanatory report with all relevant specification references, a detailed tree structured data/transaction flow monitor and an APDU level communications log in comprehensive detail. Applications are tested individually or in any linked sequence.

CAT 3000v3 performs all necessary cryptography to perform data authentication (static and dynamic – SDA, DDA and CDA), terminal/card mutual authentication, generation of message authentication codes and key derivation. RSA, DES and triple DES algorithms are fully supported. CAT 3000v3 ships with a comprehensive set of Visa, MasterCard and JCB public keys and allows the import of additional keys through a simple to use key management facility. DES operations with secret keys for live cards may be performed with the optional HSM interface.

Test scripts are written in the industry standard TCL scripting language. No wrestling with obscure bespoke syntaxes, TCL is widely used and well documented and supported; for more information see <http://tcl.activestate.com>. The TCL API gives the script programmer full control over CAT 3000v3's extensive facilities, including card operations, user interaction, results displays and log file generation. Example scripts and an extensive library of TCL procedures to perform commonly required chip card testing operations are included. Both the API and the library set are fully documented so that script developers can hit the ground running. **Engineering Panel** sends individual commands to the card and single step through transactions or other command sequences.

An EMV payment application test suite is included. No hidden extras, CAT 3000v3 will test EMV cards straight out of the box. This test suite includes issuer host simulation, including script processing, and verification of the chip data against the magnetic stripe data and now with memory chip card support.

Fully compatible with CPT 3000v3. The CAT 3000v3 can be used to develop scripts for use on the CPT3000v3. This highly successful and cost effective EMV Personalisation Validation Test Tool uses the same scripting engine as the CAT 3000v3. The CPT emulation mode enables CPT 3000v3 scripts to be fully developed and tested on the CAT 3000v3, also multi-level user logon allows unskilled operators to test cards directly on the CAT without risk. All the standard CPT 3000v3 test scripts and upgrade packages supplied by Barnes International will run on CAT 3000v3.

Test script integrity is ensured by the use of secure checksums linked to the logged on user status to detect unauthorised change or corruption of the completed script files while allowing authorised users open and full access for rapid development and debugging.

Options include Contactless Module (with PC/SC reader interface), MasterCard CPV 2.0 Certification Module, Visa GCCPVR 1.1 Test Scripts, Visa EU/CEMEA CVT Report Output and Visa VPA import modules.

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