Smartspy
Contact

Record contact transactions in the field!

Do you need to debug contact transactions anywhere from your development desk to the field? The Smartspy Contact provides you with an innovative handheld solution to observe, record and analyze communications between contact smart cards and readers without disrupting the transactions. It is designed for banks, payment systems, smart card / terminal vendors and integrators. It enables product developers and system integrators to easily check, debug and validate their smart cards and readers at any location during the integration process. Interoperability issues can be spotted without difficulty. The Smartspy Contact helps your system to go live quickly and to operate seamlessly.

Why the Smartspy Contact?

Portable

The Smarstspy Contact device fits in your pocket and can capture your card transactions in the field without a plug or a PC connection.

Robust

The tool is hard-wearing and resistant to shocks.

Reliable

The Smartspy Contact has been successfully used over the last decade for the certification of card programs.

Effective

It helps you to improve the reliability of your smart cards and readers, while reducing the time required to certify your card program.

Compatible

The tool is compatible with the ISO/IEC 7816 protocols. Additional level of analysis is available for EMV, Visa and MasterCard applications.

Analytical

Get comprehensible analysis of your card transactions, from the exchange of bytes to the application layer protocol.

For more information contact us at www.fime.com or, depending on your region:

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for Latin America/Caribbean	test_toolsLAC@fime.com	for North America	test_toolsNA@fime.com
for the Indian Subcontinent	test_toolsIN@fime.com	for Korea	test_toolsKR@fime.com

About FIME

FIME advances end-to-end transaction solutions and mobile services, enabling market security and interoperability. As an independent world-wide leader in consulting and testing services, FIME ensures the compliance of mobile devices and chip-based applications to industry standards. Its international team works with manufacturers, banks and authorities within the EMV payments, mobile near field communication (NFC), telecom, transport and e-identity sectors.

FIME

Smartspy Contact

About Smartspy Contact

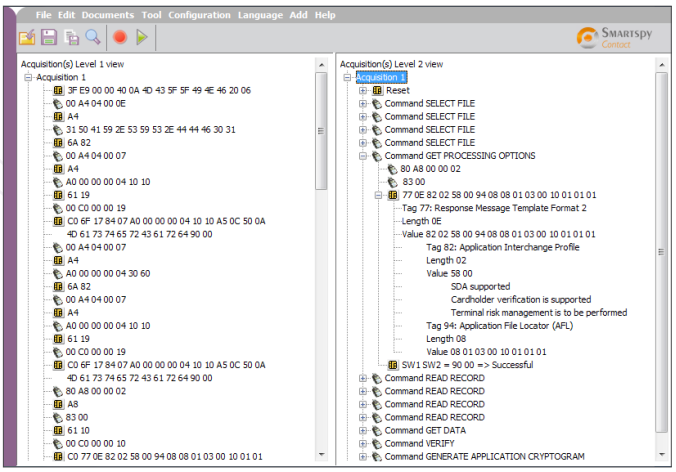
The Smartspy Contact is a complete solution including the Smartspy Contact device and the Smartspy Contact Analyzer software. The tool records the transmitted bytes over the ISO/IEC 7816-3 physical interface and interprets the ISO/IEC 7816-4 application layer protocol. Additional level of APDU command, response and TAG interpretation is available for EMV, MasterCard and Visa applications. User can also define custom APDU interpretation rules for their own applications.

The protocol analyzer enables abstraction of the physical and transport protocol layers by clearly displaying the transmitted commands at the application level. The behavior of your application becomes easily comprehensible.

The Smartspy Contact device is a user-friendly pocket-size test tool which can be used in a standalone mode or connected to a PC. It is provided with USB and serial cables for transferring data and remote control use.

The Smartspy Contact is the industry standard tool for the technical inspection of EMV transactions. It has been successfully used over the last decade for the certification of card programs. It is the tool chosen by MasterCard to record MasterCard M-TIP (MasterCard Terminal Integration Process) test transactions.

The tool is suitable for most ISO/IEC 7816 based smart card applications: banking, health care, identification, retail & loyalty, etc.



Smartspy Contact work environment

Technical Specifications

Size and weight
- 86mm x 156mm x 34mm
- 200g

LCD display for device control and status
- Support for multiple languages

Power and battery
- Powered by battery (2xAA) or USB
- Low power consumption for several days of field tests

On-board memory to work on the move
- Up to 32 transactions can be stored in the memory

Card interfaces
- Clock frequency support up to 5 MHz
- Card power supply: Class A, B, C (5V, 3.3V, 1.8V)
- ID-1 and ID-000 (SIM) card holder formats
- ID-1 card probe, optional probes for Swipe & Park / ATM and SIM cards

Supported protocols for spying
- ISO/IEC 7816-3, T=0 and T=1

Supported protocols for analysis
- ISO/IEC 7816-4
- Additional level of APDU analysis for EMV, Visa VIS, MasterCard M/Chip & M/Chip Advance applications

Smartspy Contact Analyzer
- Transferring transaction data and remote control use
- Protocol analysis
- Support for multiple languages: English, French, German, Italian, Russian, Simplified Chinese, Spanish.

Systems requirements
- PC with USB or RS232 port
- Windows XP / Vista / 7 (32 or 64-bit)

FIME®

Smartspy Contactless

Capture contactless transactions on the go!

Do you need to debug contactless transactions anywhere from your development desk to the field? The Smartspy Contactless provides you with an innovative handheld solution to observe, record and analyze communications between contactless cards/ objects and readers without disrupting the transactions. It is designed for banks, payment systems, smart card / terminal vendors and integrators. It enables product developers and system integrators to easily check, debug and validate their smart cards, NFC tags, ePassports, mobiles and readers at any location during the integration process. Interoperability issues can be spotted without difficulty. The Smartspy Contactless helps your system to go live quickly and to operate seamlessly.

Why the Smartspy Contactless?

Portable

It allows handheld use on the field with an SD memory card and lithium-ion battery.

Reliable

The tool is used by many payment systems, banks, laboratories, card and terminal providers around the world since years.

Compatible

The Smartspy Contactless is compatible with ISO/IEC 14443, ISO/IEC 18092, FeliCa, Innovatron and NFC Forum protocols.

Simple

The tool is user-friendly: intuitive menu and easy-to-read display screen.

Effective

Speed up your integration process and reduce the time to get your products certified.

Analytical

Get information on every level of the transaction, from the exchange of bytes to the transport and application layer protocols.

For more information contact us at www.fime.com or, depending on your region:

for Europe and the Middle East	test_tools@fime.com	for Asia and the Pacific	test_toolsAP@fime.com
for Latin America/Caribbean	test_toolsLAC@fime.com	for North America	test_toolsNA@fime.com
for the Indian Subcontinent	test_toolsIN@fime.com	for Korea	test_toolsKR@fime.com

About FIME

FIME advances end-to-end transaction solutions and mobile services, enabling market security and interoperability. As an independent worldwide leader in consulting and testing services, FIME ensures the compliance of mobile devices and chip-based applications to industry standards. Its international team works with manufacturers, banks and authorities within the EMV payments, mobile near field communication (NFC), telecom, transport and e-identity sectors.

Smartspy Contactless

About Smartspy Contactless

The Smartspy Contactless is a complete solution including the Smartspy Contactless device and the Smartspy Contactless Analyzer software. The tool records the demodulated RF signal of an ISO/IEC 14443-A/B or ISO/IEC 18092 based contactless interface and interprets the transport and application layer protocols. Additional level of APDU command, response and TAG interpretation is available for NFC forum, EMV, MasterCard and Visa applications. User can also define custom APDU interpretation rules for their own applications.

The protocol analyzer allows making abstraction of the physical and transport protocol layers by clearly displaying the transmitted commands at the application level (ISO/IEC 7816-4). The behaviour of your application becomes easily comprehensible. The protocol analyzer also provides support for the analysis of the transport protocol layer to diagnose low-level protocol.

The tool displays the waveforms of the captured data. The card/terminal processing times and the command/response transmission times are automatically computed to provide the detailed performance figures of the transactions. The optional performance test module is EMVco certified and improves the analysis of the duration of a transaction by capturing the terminal flashing LED and/or beep that indicates the end of a transaction.

The Smartspy Contactless device is a user-friendly pocket-size test tool which can be used in a standalone mode or connected to a PC. Maintenance contracts allow users to keep their tool up-to-date with the support of new features and specifications.

Smartspy Contactless work environment

What's in the box?

- Smartspy Contactless Analyzer software
- Smartspy Contactless device with 2GB SD memory card
- ID-1 & ePassport cardholder to enable tests at precise distances
- 2 antennas for cards/ePassports and mobile phones
- Antenna, oscilloscope and USB cables
- AC adaptor

Technical Specifications

Size and weight

- 95mm x 145mm x 28mm | 270g

LCD display for device control and status

- 55mm x 45mm and multiple language support

Power and battery

- Built-in rechargable li-ion battery with 2 hours operation
- Charging via AC adaptor

User configurable connectors for R&D use

- Triggers and demodulated output signals

Supported protocols for spying

- ISO/IEC 14443 Type A and B
- ISO/IEC 18092 (NFCIP-1)
- FeliCa (Type C)
- Innovatron (Type B')
- Bit rates supported: 106, 212, 424, 848 kbit/s

Supported protocols for analysis

- Transport layer:
  ISO/IEC 14443-4, NFCIP-1, Innovatron, Felica
- Application layer:
  ISO/IEC 7816-4, NFC Forum Tags (Type 1 – 4)
- Additional level of APDU analysis for EMV, Visa VCPS, MasterCard M/Chip *PayPass* & Mobile *Paypass*

Performance measurements

- Card/terminal processing times
- Command/response transmission times
- Optional performance test module for terminal LED/beep

Display waveforms

- Logic state, bit, byte and timing sequences
- Sound and light events from performance test module

Smartspy Contactless Analyzer software

- Transferring transaction data and remote control use
- Protocol and performance analysis
- Waveform display
- Support for multiple languages: English & French

Output file formats

- Protocol analysis: TXT and PDF
- Performance analysis: XLS (Excel)
- Waveforms: JPEG

Systems requirements

- PC with USB port
- Windows XP / Vista / 7 (32 or 64-bit)

FIME®