MP300 ACL1

A revolutionnary contactless protocol analyser

optimised for NFC transactions

The MP300 ACL1 Advantage

The MP300 ACL1 is your first choice when it comes to hassle free capture of a contactless exchange, even in difficult conditions, such as when a NFC phone is involved. Its non intrusive technology will guarantee that the phenomenon you are trying to capture will not be influenced by the presence of the probe. This tool will help you solve all interoperability issues between contactless devices, no matter if they are application, framing, or analog related.

1   **Connection of the spy probe**

2   **Plug for synchonization with external devices**

"Our aim is to check mobile payment conformance in term of transaction performance from the Sim card to the effective contactless payment terminal going through the CLF. MP300 SC2 with MP300 ACL1 sniffer allow to duplicate what is happening from the internal flow inside the mobile to the in air protocol capture, this within the same viewer GUI and full EMVco automated demodulation.."

Provider of innovative, secure and easily adoptable payment device enabling solutions - Colin tanner - Chief technical officer

The Ideal Tool

Supplied Spy Probes
- 100% non intrusive probe: positionned next to the devices that will be spied and not in-between
- Flexible spy probe: to be used in the most difficult cases, and for analog waveshape measurement

Available accessories
- Licence for analog oscilloscope

Application Fields
- Characterization of contactless smart cards & readers
- Protocol debug
- Interoperability debug

Key Points

- Support of ISO/IEC 14443 A/B, ISO 15693, Mifare™, Felica™, NFC (NFC Forum, NFC-IP1 and -IP1)
- Automatic detection of baudrate changes
- Detailed graphical representation of the spied exchanges
- Revolutionary spy probe: positionned next to the devices that are spied, zero intrusivity is guaranteed
- Evolutivity to analog spy functionalities: the MP300 ACL1 embeds an oscilloscope, showing all waveshapes and other analog measurement

- Presence of numerous business oriented interpreters, including ICAO, EMVCo, Innovatron™ (B'), NFC-IP1, NFC Forum for a better understanding of all spied exchanges.
- Only one spy probe is needed why bother with one PCD spy antenna, and one PICC spy antenna?
- Successfully deployed at all NFC chip manufacturers, and all major NFC handset designers
- Tool used at NFC Forum plugfest meetings

BUSINESS AREAS

Telecom	Banking	E-health	M2M	Contact micro-Module	E-Passeport	E-ID (Driver licences, ID cards...)

Supported protocols

ISO/IEC 14443-3 (proximity cards) (Type A/B)	
Supported data rates:	- 106, 212, 424, 828 kbps
	- Asymetrical data rates supported

B' (InnovatronTM)
ISO/IEC 15693 (vicinity cards)
Supported communication speeds: Low & high data dates, 1 out of 4 & 1 out of 256
ISO 18000-3 Mode 1
Mifare™
Types supported: - Classic, Light, Ultra Light, Ultra Light C, …
FeliCa TM (optionnal through a hardware add-on)
Available data rates: 212 and 424 kbps
NFC Forum modes
Peer2Peer, Listening, Polling
NFC Forum tags
Types supported: Tag types 1,2,3,4
ISO 18092 (NFC-IP1)
Modes supported: Active/passive mode, in both Initiator/Target variantes
Raw mode: implementation of custom protocols and support of out of standard chips

Spy Feature

Signals displayed: Field presence, modulation, sequences, bytes, I/O direction, baudrate changes, triggers...

ELECTRICAL TESTING

Analog viewer: display of the signal envelope

NI Services and Support

- Maintenance contracts :
  - Firmware/software updates
  - Hardware repair
  - Onsite customer support
  - Replacement tool
- Technical support located in Asia, Europe and Americas

- Training courses customizable :
  - knowledge level based
  - Time constraints
  - Topics of interest
- Debug and pre-certification of contact and contactless devices