

MP300 SC1 (spy)

A cutting edge ISO/IEC 7816-3, SWP and USB 2.0 protocol analyser

- ◆ Ideal CLF tester
- ◆ Protocol analysis and spy of ISO/IEC 7816, SWP and USB 2.0 protocols
- ◆ Electrical measurement features
- ◆ Evolutivity into an ISO/IEC 7816 and SWP smartcard simulator



OVERVIEW :

The main features of the MP300 SC1 are :

- Protocol analysis of exchanges happening following the ISO/IEC 7816-3 and -4, SWP/S-HDLC/HCI, and USB 2.0 protocols
- Compatible with ETSI TS 102 613 and TS 102 622 specifications
- Automatic detection of baudrate changes
- Detailed graphical representation of the spied exchanges
- Non intrusive data acquisition probe
- All protocols can be spied simultaneously
- Possibility to perform physical measurement (current and voltage oscilloscope-like display)
- Evolutivity into a smartcard emulator (ISO/IEC 7816-3 and –4 and SWP)
- Numerous possibilities of protocolary testing (response times, wrong CRC, parity errors)
- Physical customisation of the emulated smartcard
- Wide range of probes available, to cover all types of handsets, as well as traditional ID1 smartcards
- Backwards compatibility with the Star 3150
- Open platform : integrate the MP300 SC1 inside your own test platform
- Supplied with the MPManager software suite, enabling the complete control of the tester without any programming knowledge
- Possibility to synchronise this tool with a MP300 TCL2 or SCL1, for the analysis of a complete NFC or dual interface transaction

This tester will typically be used in the following contexts :

- Protocolary analysis of a handset or a banking terminal
- On-site debugging sessions
- Characterisation of a CLF, or of a smartcard reader
- Characterisation of the protocol handling of a smartcard, or a U-SIM

SPECIFICATIONS :

Spy feature

Type of events displayed	Logical state change Characters Modification of baudrate Clock frequency detection Analog representation of the signals I/O direction
Protocols supported	ISO/IEC 7816-3, SWP, USB 2.0 (simultaneous spy possible without accuracy damage)
Signals displayed	Signals C1, C2, C3, C4, C6, C7, C8 SWP S1, SWP S2 Trigger in Trigger out
Accuracy	20ns

Programmable parameters

SWP S2 channel current threshold
SWP (ETSI TS 102 613 and TS 102 622)
I/O direction detection threshold
ISO/IEC 7816-3
Protocol analysis mode

Supported protocols

Supported speeds	Low speed, full speed
USB 2.0	
Example of supported chips	Eurochip T2G SLE 4442 SLE 4407 AT24CXX
Implemented	
Synchronous chips (memory chips)	
LLC level spy (S_HDLC, ACT, CLT)	Available
Block level spy	Available
Baudrate supported	From 49kbps to 1.9Mbps
SWP (ETSI TS 102 613 and TS 102 622)	
Block level spy	Available
T=0 and T=1 protocols	100% implemented
ISO/IEC 7816-3	
Protocol analysis mode	

Available tests

Contacts available	C1, C6, C7
Number of samples	512000 (unlimited for Vcc)
Possibility to execute simultaneous voltage and current measurement to characterise both the terminal and the smartcard	
Electrical measurement	

Triggers

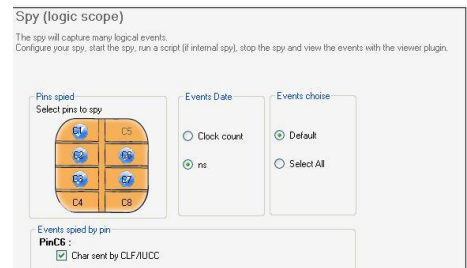
The MP300 SC1 offers triggers, to synchronise or to be synchronised by external laboratory devices (oscilloscopes,...)
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Starting the spy is just as simple as clicking a button. At the end of the session, the viewer is available.



The MP300 SC1 is supplied with the MPManger software, whose aim, is to open all of the tester's functionalities, accessible just with mouse clicks.

First, the user just needs to select the information he is interested in.
The choice is available contact per contact.



ACCESSORIES :

Micropross supplies a complete range of accessories for the MP300 SC1, that include :

- A SIM to ISO converter
- Numerous shapes of probes, to use this tester with different types of contact smartcard readers and handsets
- A probe to enable spying sessions between a smartcard and an external reader
- A probe for oscilloscope connection
- The option to turn the MP300 SC1 into a contact smartcard simulator

We also supply packages to extend the warranty of the tester. Please ask us for the maintenance contracts available.