

## Star 3150

A worldwide reference in ISO/IEC 7816 smart card spy and simulation

- ◆ Supports ISO/IEC 7816 protocol
- ◆ Supplied with the StarScope software, allowing a convenient data analysis
- ◆ Includes smartcard simulation features
- ◆ Wide range of spy probes available



## OVERVIEW :

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 smartcard reader

The main features of the Star 3150 are :

- Protocol analysis of exchanges happening following the ISO/IEC 7816-3 and -4 protocols
- Automatic detection of baudrate changes
- Detailed graphical representation of the spied exchanges
- Non intrusive data acquisition probe
- Smartcard emulator functionality (ISO/IEC 7816-3 and &ndash;4)
- Numerous possibilities of protocolary testing (response times, wrong CRC, parity errors)
- Wide range of probes available, to cover all types of handsets, as well as traditional ID1 smartcards
- Open platform : integrate the Star 3150 inside your own test platform
- Supplied with the StarScope software suite, enabling the complete control of the tester without any programming knowledge

## SPECIFICATIONS :

### Supported protocols

Protocol analysis mode	
ISO/IEC 7816-3	
T=0 and T=1 protocols	100% implemented
Block level spy	Available
Synchronous chips (memory chips)	
Implemented	

Example of supported chips	Eurochip T2G SLE 4442 SLE 4407 AT24CXX
<b>Smartcard emulation mode</b>	
ISO/IEC 7816-3	
T=0 and T=1 protocol	100% implemented by firmware
Custom protocol emulation	Available

### Programmable parameters

<b>Protocol analysis mode</b>	
ISO/IEC 7816-3	
I/O direction detection threshold	
<b>Smartcard emulation mode</b>	
ISO/IEC 7816-3	
Guard time	Defined in ETUs
Smartcard response time	Defined in ETUs

### Spy feature

Accuracy	50ns
Signals displayed	Signals C1, C2, C3, C4, C6, C7, C8
Protocols supported	ISO/IEC 7816-3 Synchronous (memory chips, ISO/IEC 7816-10)
Type of events displayed	Logical state change Characters Clock frequency detection I/O direction

### Available tests

Perturbations (smartcard emulation mode)
Sending out of standard blocks (wrong CRC, wrong data length, ...)
Sending characters with parity error
Simulating reception of parity errors
Modifying the guardtime on the fly

### Triggers

The Star 3150 offers triggers, to synchronise or to be synchronised by external laboratory devices (oscilloscopes,...)
The trigger can be activated on numerous conditions, including the detection of a given character sequence.

### Communication parameters

TCP/IP 10/100 Mbps
RS 232

### Software development

<b>Remote development (the code is executed from the PC)</b>	
Elements available	Communication Dll supplied

Supported programming languages	C, C++, VB, Java, .NET Any language that supports Dll
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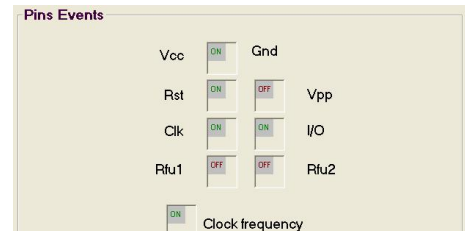
## User Interface

StarScope
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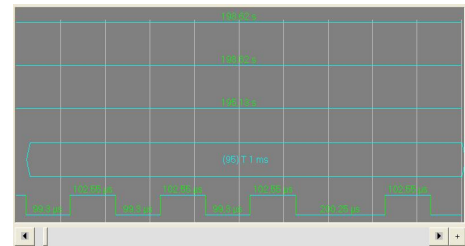
## SOFTWARES :

The Star 3150 is supplied with the StarScope user interface, whose aim is to help the user to get the most of his tester.

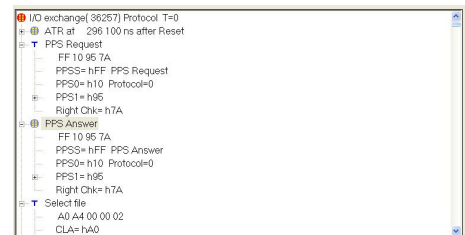
First, the user will select which contacts he wants to spy.



Starting the data acquisition is just as easy as clicking on a button. Once the spy session is over, the data is downloaded to the PC, and after a few seconds, the exchange is ready to be analysed.



A tree display of the exchanges is also available. All frames are analysed according to a given standard. User can define their own commands inside a file, and StarScope will take this file into account to display the name of the commands inside the tree.



## ACCESSORIES :

Micropross supplies a complete range of accessories for the Star 3150, that include :

Numerous shapes of probes, to use this tester with different types of contact smartcard readers and handsets

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