

FLEXIBLE TESTING TOOL v2.3

Revision 20xx available [NOW](#)



EKMS 308
EKMS 608
NSA 90-02A
EKMS 217
compliant

Two variable
speed DS-101
over RS-485
ports

Two variable
speed DS-101
over RS-232
ports

One full-speed
DS-102 port

Monitoring for
DS-101 over
RS-485 and
RS-232

Simplistic, high-
level scripting
language
controlled

Windows GUI
and Command
Line Programs

Java Interface

C++ Interface



The Flexible Testing tool provides a simplistic, flexible means to:

- Simulate key loading devices (SKL, DTD, KYK-13, DTS...)
- Simulate cryptographic equipment (ECUs) for testing Key Loading Devices
- Fully validate DS-101 Primary and Secondary implementations including injection of all types and levels of errors.
- DS-101 over RS-485 and RS-232
- Fully validate DS-102 implementations including injection of all types and levels of errors.
- Monitor DS-101 traffic with insight into each frame and where it originated including frame timing. Allows high-level and low-level debugging of DS-101 interfaces
- Windows GUI program which run scripts output excel compatible data grid.
- Simple scripting language (numerous, fully-functional examples included)
- Runs multiple scripts iteratively and tracks time of execution and pass/fail.
- Command line (DOS) interface for automation of test in manufacturing environments. Also allows operator interactive programs to be created
- C++ Interface for user application development.
- Java Interface for user application development.
- Target board control signals (2 relays controlled by scripts can be used to reset target board or force a signal connection)

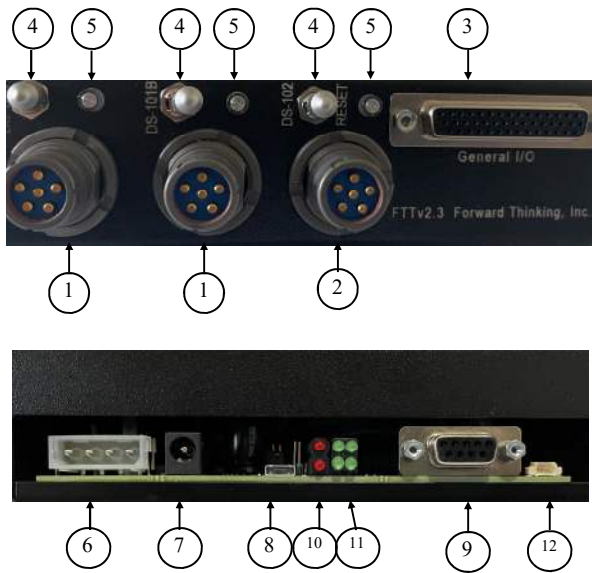
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*Another innovative product
from the
Embedded Security Experts*

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FORWARD THINKING INC

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Technical Specifications

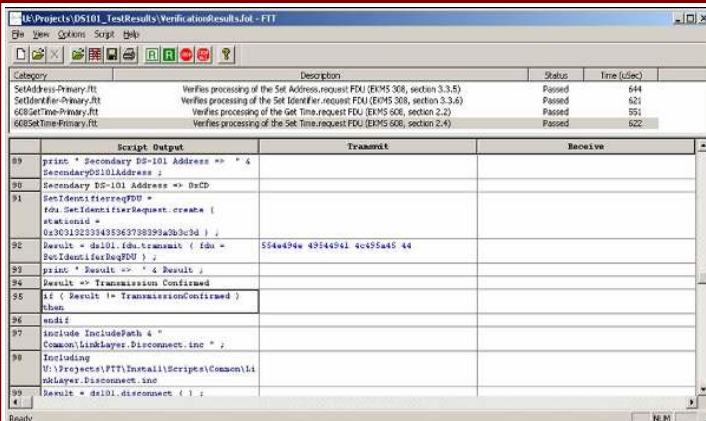
Dimension: 5 1/2" wide x 1 3/4" high x 7" deep (standard 5 1/4" drive slot)

Weight: 2 pounds

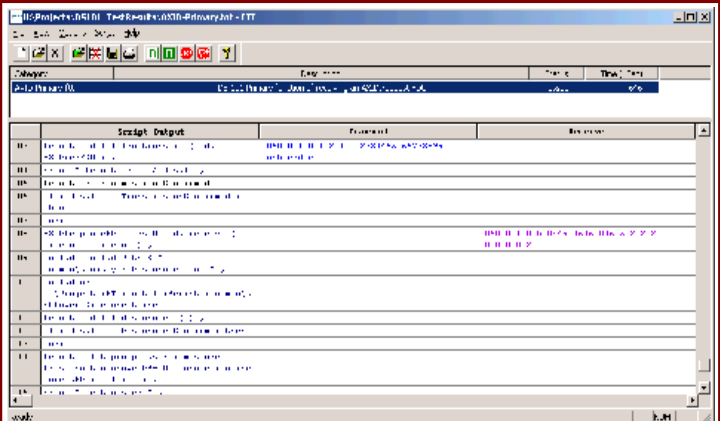
Power: 6.5Vdc to 32Vdc (1.8W linear)

- Front Connectors:
- ① Two (2) DS-101 U-283/U male connectors
 - ② One (1) DS-102 U-283/U male connectors
 - ③ HD44 connector for customizable I/O including DS-101 over RS-232 pin-out and 2 script controllable relays.
 - ④ DS-10x lockable toggle switch (mimics physical connection / disconnection of device)
 - ⑤ DS-10x Tri-color LED (*idle*, *transmit*, *receive*)
- Back Connectors:
- ⑥ Standard PC power connector (only 12V is used)
 - ⑦ Barrel Power connector (6.5Vdc to 32Vdc).
 - ⑧ USB-C power and Comm Port for FTT command.
 - ⑨ DB0 RS-232 Comm Port for FTT command (non standard pinout)
 - ⑩ LEDs (Bottom: reset, Top: FPGA is loading).
 - ⑪ LEDs (Top Left: Heart beat, other 3 are voltage good indicators).
 - ⑫ Proprietary test port.

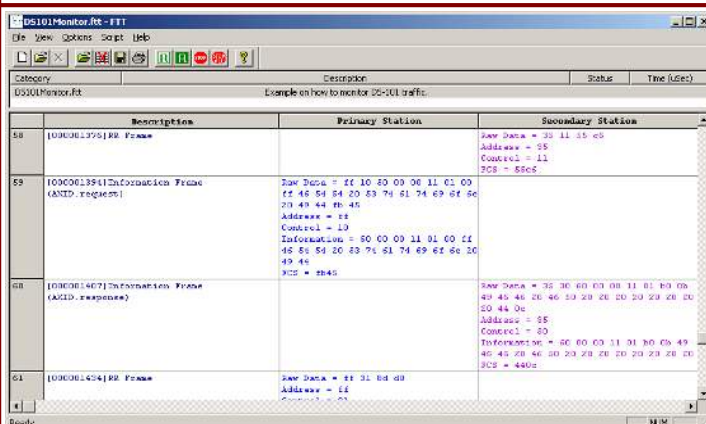
SCREEN SHOTS



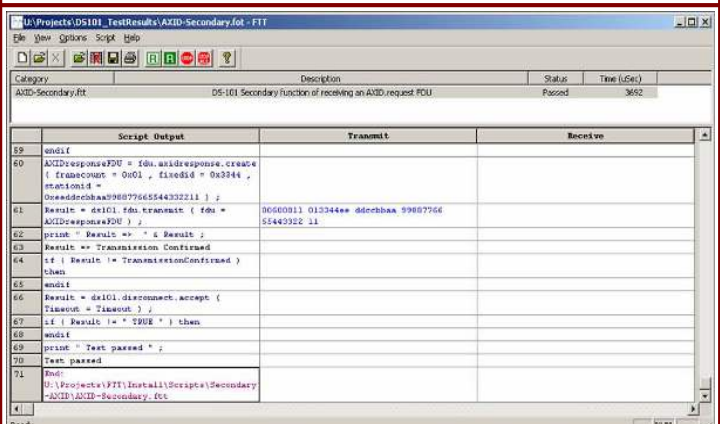
DS-101 Primary Station Validation



DS-101 Primary Station AXID request



DS-101 Monitoring



DS-101 Secondary Station AXID response

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