

Absolute Analysis Investigator™

“The Developer’s Choice for Protocol Test”

All Functions. All Speeds.

Investigator™ is an extensible architecture for multi-protocol and multi-function testing supporting a wide variety of service network topologies. This scalable and versatile instrument for high-speed serial data communications measurement, analysis and verification provides unprecedented flexibility via our user-editable protocol database tool. The architecture’s building block design allows each of our products to work individually, or in conjunction with the others under a unified system that is fully backward and forward compatible to all previous generations. Each Absolute Analysis Investigator™ system can be fully customized to meet the specific needs of our customers.

Integrated Tools

Investigator™ test applications are all entirely integrated. Investigator™ solutions therefore form a flexible, unified, scalable and upgradeable architecture, facilitating multi-protocol testing across devices bridging other protocols and link speeds.

- ◆ Protocol Analyzer
- ◆ Traffic Generator
- ◆ Protocol Editor
- ◆ Impairment Tester
- ◆ Error Injector
- ◆ Bit Error Rate Tester
- ◆ Network Connections
- ◆ API Library
- ◆ Performance Statistics

Complete Protocol Analysis

Investigator Protocol Analyzers capture and display 100% of link data, even at full line rates. Views of primitives, as well as frame delimiters, frame header, and payload data are also provided. The Protocol Database Editor allows the user to define additional decoding of protocols to further enhance the existing functions. Deep, bit-level triggering and pre- and post-filtering capabilities ensure that relevant data can be extracted from multi-gigabit data streams.

Protocol Analyzer Features

- ◆ Easy-to-use drag & drop GUI
- ◆ Customizable & configurable database decodes for all protocols
- ◆ 100% true line rate
- ◆ Multiple lane support with cross-lane triggering
- ◆ Independent filters on each lane with bit-level control
- ◆ Standard and non-standard speeds

Absolute Analysis Investigator™ Protocol Test Solutions

Protocol Editor

Several users have implemented their own user-defined protocols in Investigator. The Protocol Database Editor allows the Protocol Analyzer's standard database to be expanded to support user-defined protocols. Once part of the database, a user-defined protocol can be used as a filter or can trigger scenarios, in addition to being fully decoded in the trace viewer. Other features, such as post-capture filtering, are fully available as if the protocol was part of the standard Investigator™ Protocol Analyzer database.

Traffic Generator

- ◆ Output any traffic load scenario up to full line rate traffic
- ◆ Simulate protocol, data and CRC errors
- ◆ Control inter-frame and inter-burst packet gaps
- ◆ Test buffer limits by manipulating flow control fields
- ◆ Stress multiple links simultaneously with no performance loss
- ◆ Monitor statistics in real time

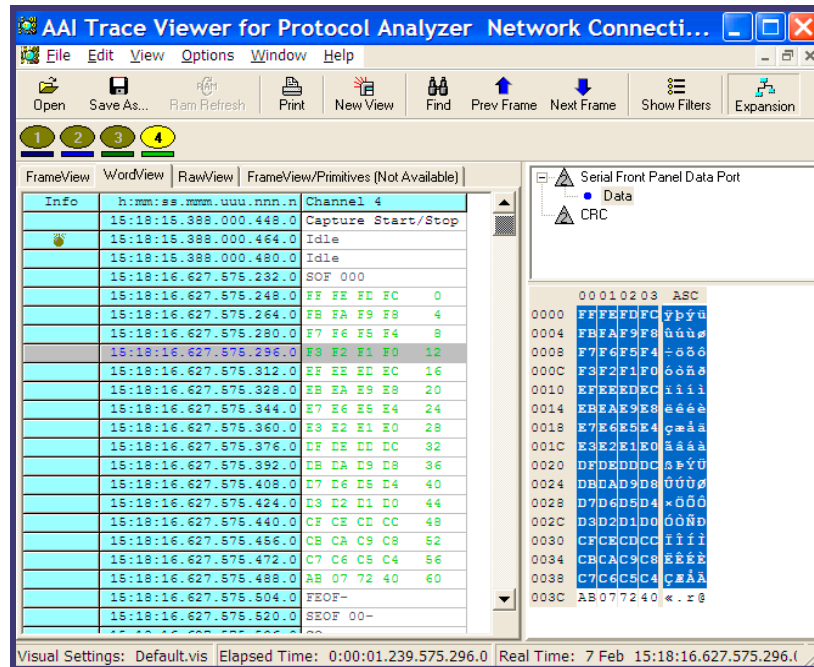
Impairment Tester

- ◆ Simulate cable length & delays
- ◆ Determine the amount of delay
- ◆ Select criteria to identify errors
- ◆ Check for delays to the millisecond
- ◆ Report bit-level diagnostic details
- ◆ Supports sequential and direct access devices

Error Injector

- ◆ Inject real-time sequential errors
- ◆ Replace data on the link with user-defined data in real time
- ◆ Corrupt values or remove/replace data and simulate slow device response times
- ◆ Recalculate and insert CRC values automatically where applicable

Filter. View. Capture.



Easy-to-use drag & drop GUI

100% data capture at full line rate

Multiple lane support with cross lane triggering

Maintain. Measure. Test.



Link status and utilization

Frames transmitted

Bytes transmitted

Frames transmitted by size

Absolute Analysis Investigator™ Protocol Test Solutions

Bit Error Rate Tester

- ◆ Generate multi-speed, multi-application and custom patterns
- ◆ Support up to 32 ports of testing
- ◆ Verify and validate lowest level connectivity, down to 10⁻¹²
- ◆ Generate different forms of IEE pattern and jitters such as CRPAT, CJTPAT, CSPAT, and Incrementing

Network Connections

The Investigator supports multiple physical layer options. The Investigator™ platform supports Small Form Factor Pluggable modules (SFP's) to allow the user to easily switch between various optical and copper physical layers. Passive optical taps are also available where the circumstances dictate that the insertion of the test tool cannot disrupt the network traffic. (Protocol Analysis only.)

API Library

The Investigator API Library is a 'C' API that provides the user with programmatic control over all the Investigator™ tools. Using the API Library, the user can write custom applications that function over the platform or create code for test automation.

Performance Statistics

A real time statistics module provides bookmarks, search, and tabular or graphical displays of link captures to further enhance Investigator's reputation for unrivalled flexibility, power and ease of use in high-speed data capture, decode and analysis.

Training

Absolute Analysis provides comprehensive training courses for products and protocols. Training can be provided at your location or remotely, and can be customized to your requirements.

Service and Support

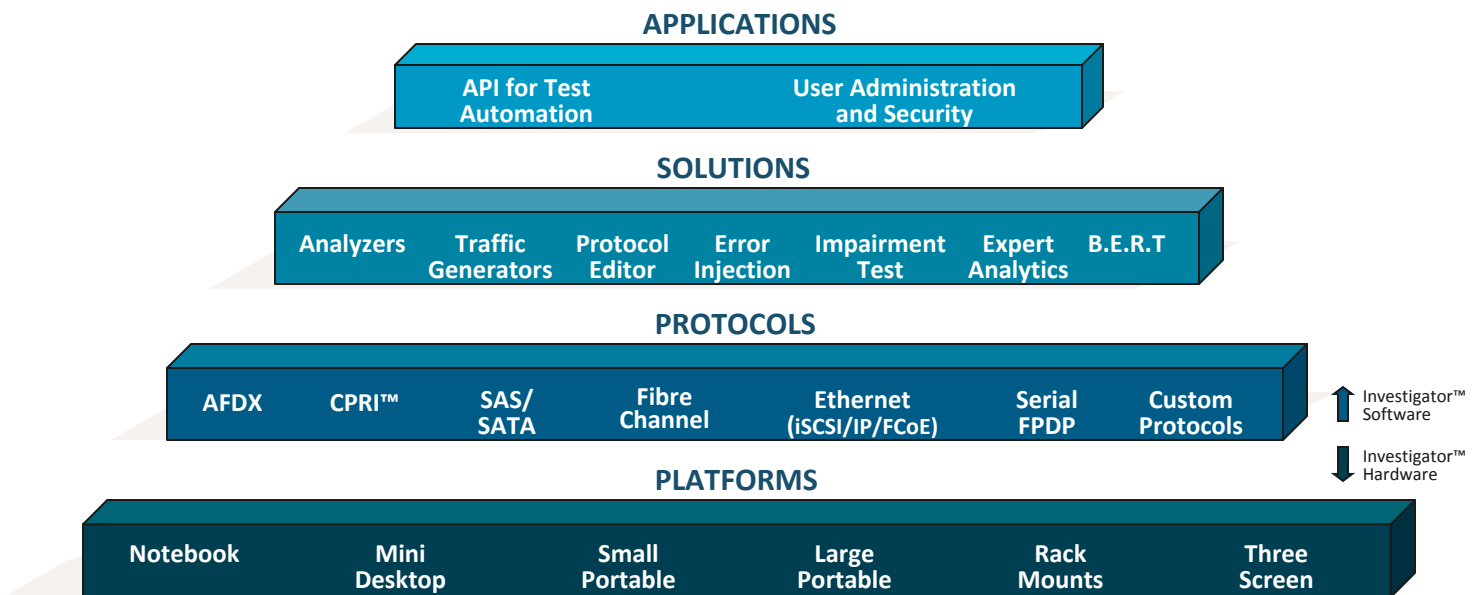
Absolute Analysis provides unsurpassed service to all Investigator™ users including remote diagnostics, extended warranties and upgrade paths to current offerings from any Investigator™ system.

Investigator™ Systems		Dimensions	Approx. Weight	Number of cards
3 Screen Portable		17" x 13.6" x 10.6"	45 lbs	4
Notebook		10" x 2.6" x 15.1"	5 lbs	2
Mini Desktop		12.6" x 3.7" x 13"	19 lbs	2
Small Portable		16.7" x 13.1" x 6.8" ruggedized plastic	23 lbs	2
Large Portable		17" x 13.6" x 9.6" ruggedized aluminum	38 lbs	4
19" Rack Mounts		1U x 19" x 17.5"	25 lbs	1
		2U x 19" x 20"	35 lbs	2
		4U x 19" x 18"	45 lbs	8

Absolute Analysis Investigator™ Protocol Testing Solutions

Absolute Analysis Investigator™ has been designed from the ground up to be a multi-speed, multi-protocol, multi-function test platform. Investigator™ is used in the development, qualification, manufacturing and support of equipment with external or embedded communications interfaces. These communications interfaces can be based on industry standards or Investigator™ can also be customized to support non-standard interfaces and protocols.

Absolute Analysis Investigator™ Architecture



For more info contact your Local Rep:

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