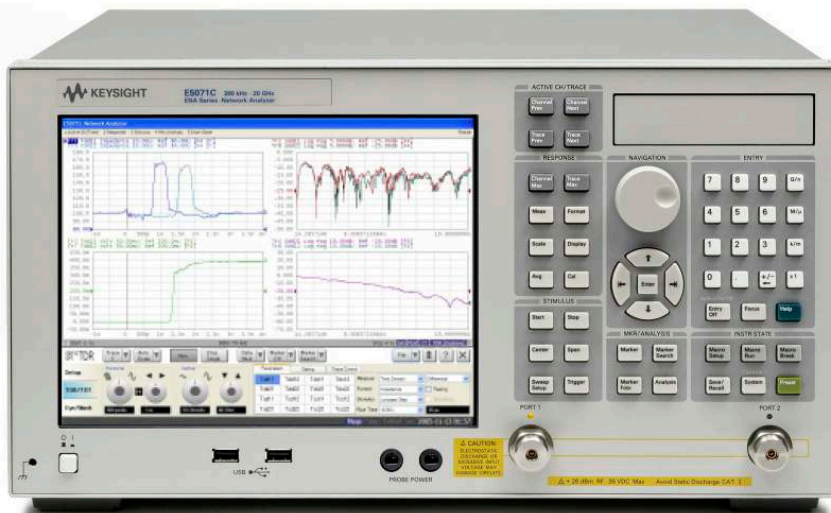


Keysight Technologies

Compliance Test Solution

Using E5071C ENA Option TDR

Comprehensive measurement solution
for interconnect analysis



Certified Solution For High-speed Digital Standards

All high-speed digital standards have technical documents defining the requirement and measurement parameters to ensure interpretability between devices from different manufacturers. ENA Option TDR is a certified solution for cable, connector, transmitter, or receiver compliance testing of a variety of the standard including USB3.0 or HDMI. The solution is used worldwide by authorized test centers to perform compliance testing for the standard.

All method of implementation (MOI) documents, and state files for the ENA Option TDR are currently available from the Keysight Technologies, Inc. web site at www.keysight.com/find/ena-tdr_compliance. State files contain pre-configured setups in accordance with the standard requirements and allows for quick and easy measurements of your devices.

ENA Option TDR Features

Features	Values
one-box solution	Frequency domain, time domain, and eye diagram analysis is available in a single instrument. By observing both the time and frequency domain response at the same time, deeper signal integrity insight can be obtained.
Fast and accurate measurements	Due to the low noise architecture, oftentimes averaging is not required as in traditional TDR oscilloscopes. Real-time analysis allows for more efficient troubleshooting of designs.
ESD Robustness	High ESD robustness (up to 3 kV) is achieved through internal protection circuits, reducing downtime and repair costs dramatically compared to previous solutions.
Easy and quick setup	Certified MOI documents that guide through necessary compliance tests are available free of charge. By recalling the state file, you can easily setup, measure and perform limit testing for pass/fail judgment.
Hot TDR measurements	Hot TDR is the impedance measurement of active devices under actual operating conditions. The ENA Option TDR provides faster and more accurate impedance measurements of transmitters in operating state.

Certified High-speed Digital Standards

Cable & Connector assembly

- USB3.0
- HDMI
- SATA
- DisplayPort
- MHL
- PCIe®
- 10GBASE-T ¹

Transmitter & Receiver (Hot TDR)

- SATA
- MIPI™ (D-PHY & M-PHY)
- MHL
- Thunderbolt

1. No certified program for Ethernet. MOI and state file are provided

Refresh Technology at a Lower Cost

1. Upgrade hardware

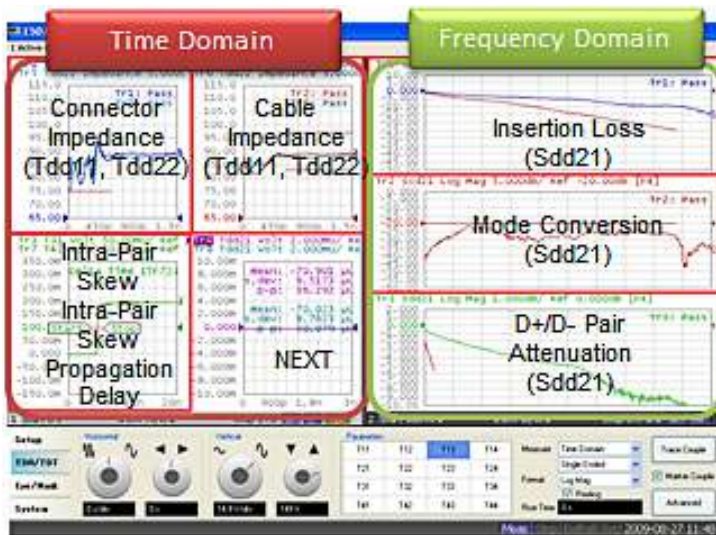
Upgrade your E5071C's frequency options (up to 20 GHz) at any time after purchase to meet future measurement demands of high-speed data rate.

The E5071C's upgradability will keep your instruments up-to-date and extend the life of your test systems for future expansion.

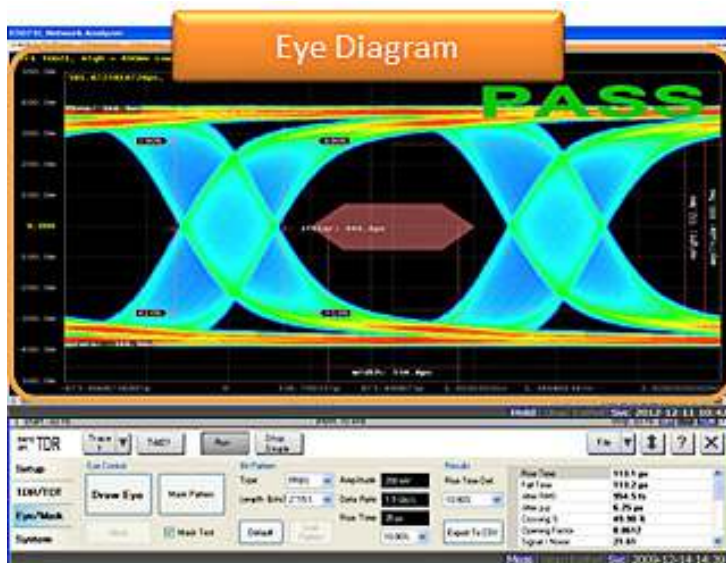
2. Premium Trade-in Solutions

Receive a credit worth up to 35% when you trade eligible models toward the new E5071C network analyzer between now and April 30, 2014. Visit (<http://savings.tm.keysight.com/index.cgi?ALIAS=T-WW-WN-009&User:LANGUAGE=en>) for more details.

Contact Keysight sales representatives, if you want to trade in the model that is not listed as eligible.



USB3.0 Connector & Cable Measurement Example



HDMI 1.4b Cable Measurement Example (Stressed Eye Diagram)



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Ordering Information

E5071C ENA Series Network Analyzer

Option 480	4-port test set, 9 kHz to 8.5 GHz without bias tees
Option 485	4-port test set, 100 kHz to 8.5 GHz without bias tees
Option 4D5	4-port test set, 300 kHz to 14 GHz with bias tees
Option 4K5	4-port test set, 300 kHz to 20 GHz with bias tees
Option TDR	Enhanced Time Domain Analysis Option

For more information on Keysight Technologies' products, applications or services, please contact your local Keysight office. The complete list is available at: www.keysight.com/find/contactus

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