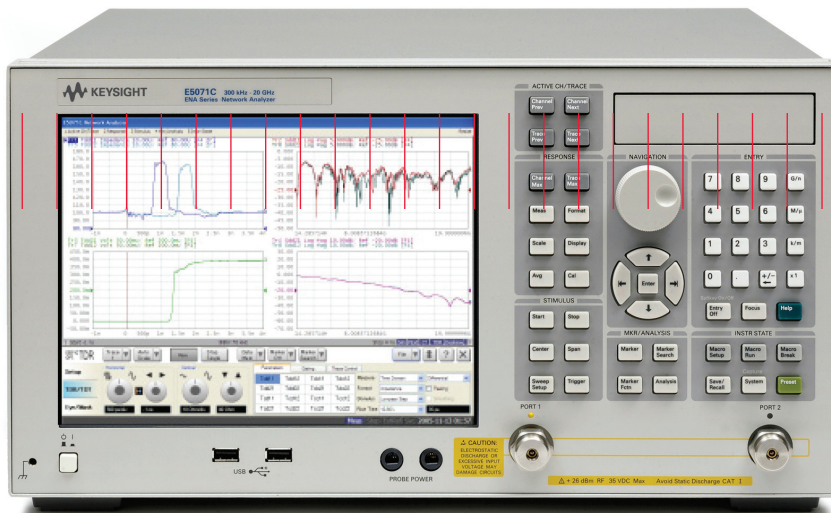


Keysight Technologies

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.

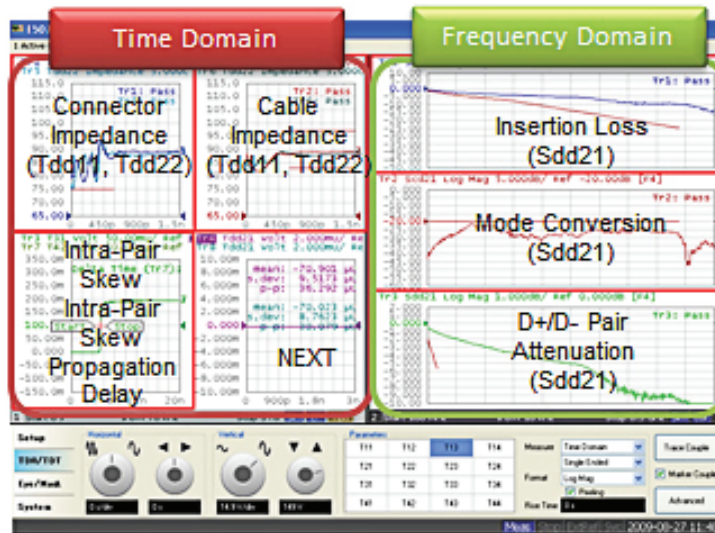
The E5071C's upgradability will keep your instruments up-to-date and extend the life of your test systems for future expansion.

2. Premium Trade-in Solutions

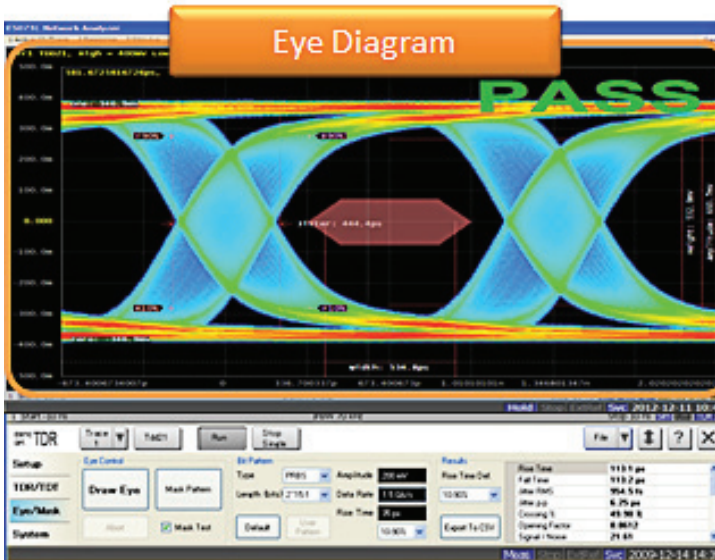
Receive a credit worth up to 35% when you trade eligible models toward the new E5071C network analyzer between now and April 30, 2014.

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.



USB.0 Connector & Cable Measurement Example



HDMI 1.4b Cable Measurement Example (Stressed Eye Diagram)

myKeysight
www.keysight.com/find/mykeysight
 A personalized view into the information most relevant to you.

PCI-SIG®, PCIe® and the PCI Express® are US registered trademarks and/or service marks of PCI-SIG.

www.keysight.com/find/ena-tdr_compliance

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

Americas

Canada (877) 894 4414
 Brazil 55 11 3351 7010
 Mexico 001 800 254 2440
 United States (800) 829 4444

Asia Pacific

Australia 1 800 629 485
 China 800 810 0189
 Hong Kong 800 938 693
 India 1 800 112 929
 Japan 0120 (421) 345
 Korea 080 769 0800
 Malaysia 1 800 888 848
 Singapore 1 800 375 8100
 Taiwan 0800 047 866
 Other AP Countries (65) 6375 8100

Europe & Middle East

Austria 0800 001122
 Belgium 0800 58580
 Finland 0800 523252
 France 0805 980333
 Germany 0800 6270999
 Ireland 1800 832700
 Israel 1 809 343051
 Italy 800 599100
 Luxembourg +32 800 58580
 Netherlands 0800 0233200
 Russia 8800 5009286
 Spain 0800 000154
 Sweden 0200 882255
 Switzerland 0800 805353
 Opt. 1 (DE)
 Opt. 2 (FR)
 Opt. 3 (IT)
 United Kingdom 0800 0260637

For other unlisted countries:
www.keysight.com/find/contactus
 (BP-07-01-14)

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

