

N5399A HDMI Electrical Performance Validation and Compliance Software for Infiniium Series Oscilloscopes

Simplify the validation of HDMI designs with a variety of analysis features



Verify and debug your HDMI designs faster with easy operation

Agilent Technologies N5399A HDMI electrical performance validation and compliance software for Infiniium oscilloscopes provides you with a fast and easy way to verify and debug your high-definition multimedia interface (HDMI) designs.

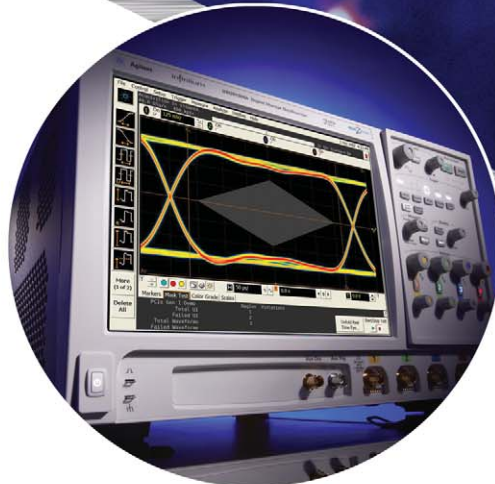
The HDMI electrical test software is designed for use in HDMI Authorized Test Centers (ATCs), so you can confidently use it for HDMI compliance testing. It also is an excellent debug tool for your HDMI applications. This software performs a wide range of tests required to meet the HDMI electrical specifications that are documented in section 4.2 of the HDMI base specification.

Using the N5399A HDMI electrical test software, you can execute the most difficult physical layer tests for HDMI sources with the Infiniium Series oscilloscopes. In addition, the software displays the measurement data results in a flexible report format; the report also provides a margin analysis that shows how closely your device passed or failed each test.

Features

The N5399A HDMI electrical test software offers several features to simplify the validation of HDMI designs:

- Four channel measurements for increasing productivity
- Compliance test and debug modes available



- Test setup wizard for easy operation
- Wide range of electrical tests
- Measurement process configurability
- Automated scope measurement setup
- Flexible results reports
- Pass/fail margin analysis
- Advanced analysis and debug capability

With the HDMI electrical test software, you can use the same oscilloscope you use for everyday debugging to perform automated testing and margin analysis based on the HDMI-specified test checklist.

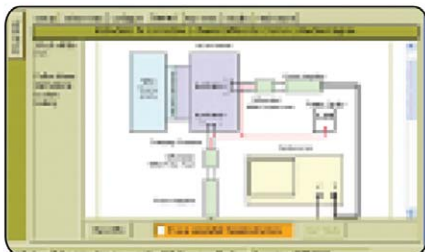
Also, you can perform advanced analysis on your test results with the EZJIT Plus jitter analysis and the SDA high-speed serial data analysis software that run on the Infiniium oscilloscope.



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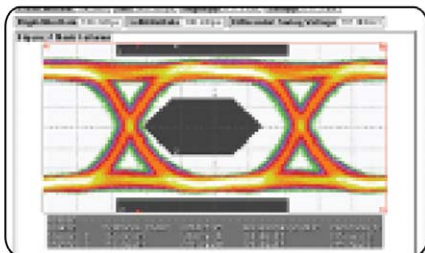
The new test setup wizard for easy operation

The Agilent automated test engine guides you quickly through selecting and configuring tests, setting up the connection, running the tests, and viewing the results. You can easily select individual tests or groups of tests with a mouse-click. In addition, you can choose either compliance test mode or debug mode from the configuration menu.



Thorough performance reporting

The N5399A HDMI compliance and validation software generates thorough reports that not only capture the performance and status of the device under test, but also capture the screen shots of your most significant measurements for your perusal and evaluation.



Increasing productivity and supporting the latest HDMI CTS

The N5399A software provides four-channel automated measurement capability that increases productivity dramatically. In addition, the software allows you to equalize the cable for receiver eye analysis, which is required for HDMI CTS compliance. This feature can be turned on and off for further insight into cable performance.



Test performed

The N5399A HDMI electrical performance validation and compliance software performs the following tests as per the HDMI Compliance Test Specifications 1.3 (CTS1.3) as documented in section 4.2 of the HDMI base specification.

Assertion number	Transmitter tests
Section 7.0	Transmitter tests
Test ID 7.2	TMDS V_L
Test ID 7.4	TMDS T_{Rise} and T_{Fall}
Test ID 7.6	TMDS Inter Pair Skew
Test ID 7.7	TMDS Intra Pair Skew
Test ID 7.8	TMDS Clock Duty Cycle
Test ID 7.9	TMDS Clock Jitter
Test ID 7.10	TMDS Data Eye Diagram
Section 5.0 and 8.0	Cable and Receiver Tests
Test ID 5.3	Cable Eye Diagram Test
Test ID 8.5	Min/Max Differential Swing Tolerance
Test ID 8.7	TMDS Jitter Tolerance Ciliibrations

Note: Sections 5.0 and 8.0 tests require the E4887A TMDS signal generator and ValiFrame software. For more infromation, please refer to the data sheet.

For more information on this and other Agilent scopes please visit www.agilent.com/find/HDMIsoftware

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