

# quantumdata

## 980B ADVANCED TEST PLATFORM

The 980B Advanced Test Platform can be configured with up to (5) five modules. The six (6) current modules are:

- 980 HDMI Protocol Analyzer module (300MHz).
- 980 HDMI Generator/Analyzer module (300MHz). 2.
- 980 MHL CBUS Compliance Test module. 3.
- 980 DP Video Generator module (HBR2 data rates).
- 980 HDMI 2.0 Video Generator module (6G data rates).
- 980 HDMI 2.0 Protocol Analyzer module (6G data rates).

The platform and its modules can be controlled either through the PC-based 980 GUI Manager or through the embedded 980 GUI Manager running on the 980B itself.

The 980B's built-in 15-inch color touch screen with 1024 x 768 resolution provides a graphical user interface (GUI) to control the instrument's modules and to view incoming video and metadata in the Real Time mode when using the 980 HDMI Protocol Analyzer module.





## **MODULE OPTIONS**

#### 980 HDMI Protocol Analyzer module

The 980 HDMI Protocol Analyzer module provides compliance testing and full visibility into the HDMI and MHL protocol, timing, control and auxiliary data up to TMDS clocks of 300MHz (HDMI). The 980 HDMI Protocol Analyzer module captures and decodes encrypted or unencrypted metadata (protocol data, audio sample, infoframes and other data islands) as well as HDMI DDC transactions and HDMI CEC messages. Module supports compliance testing for HDMI 1.4x. 2.0 and MHL (1.2, 1.3, 2.0 and 2.1 CTS).

#### 980 HDMI Generator module

The 980 HDMI Generator module supports video and audio functional testing at data rates up to 300MHz for testing HDTVs with 4K x 2K resolutions. The module features two (2) HDMI outputs—both active simultaneously—for testing HDTVs with multiple HDMI inputs. The module's optional analyzer (future) provides basic functional testing of source devices.

#### 980 HDMI 2.0 Generator module

The 980 HDMI 2.0 Generator module supports video and audio functional testing and compliance testing at TMDS character rates up to 600MHz for testing HDTVs with 4K x 2K resolutions at 60Hz.

## 980 HDMI 2.0 Protocol Analyzer module

The 980 HDMI 2.0 Protocol Analyzer module supports video and audio functional and compliance testing for HDMI 2.0 sources at TMDS character rates up to 600MHz.

## 980 MHL CBUS Compliance Test module

The 980 CBUS Compliance module provides complete test coverage of the CBUS Link Layer, RCP tests and Common tests in MHL 1.2, 1.3, 2.0 & 2.1 CTS. The MHL CBUS Compliance solution enables you to conduct compliance tests on your MHL devices in accordance with the MHL Compliance Test Specifications (CTS).

# 980 DP 1.2 Video Generator module

The 980 DP1.2 Video Generator module supports video functional testing at link rates up to 5.4Gb/s with 1, 2, or 4 lanes for testing high-end displays. The module features DisplayPort 1.2 outputs-both (2) active simultaneously—for testing displays with multiple DisplayPort inputs. Future releases will offer analysis for testing DisplayPort 1.2 source devices.

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#### **Color Touch Display**

Screen Size	15" Diagonal
Resolution	1024 x 768 Col 24 bit RGB
General Specifications	
Size (cm)	38.7(H) x 36.5(W) x 15.9(D)
Weight (kg)	10.78
AC Mains	
Frequency	47 to 63 Hz
Voltage	90-264 VAC

#### Administration

Ethernet (RJ-45) for external GUI Manager Command line control through telnet. Touch Screen display for embedded GUI Manager

## 1. 980 HDMI Protocol Analyzer module (p/n 95-00083)

The 980 HDMI Protocol Analyzer module provides compliance testing and full visibility into the HDMI and MHL protocol, timing, control and auxiliary data up to TMDS clocks of 300MHz.

### 2. 980 HDMI Video Generator module (p/n 95-00085)

The 980 HDMI Generator module supports video and audio functional testing at data rates up to 300MHz for testing HDTVs with 4K x 2K resolutions.

## 3. 980 MHL CBUS Compliance Test module (p/n 95-00099)

The 980 CBUS Compliance module provides complete test coverage of the CBUS Link Layer compliance tests for source, sinks and dongles for MHL CTS.

#### 4. 980 HDMI 2.0 Video Generator module (p/n 95-00111)

The 980 HDMI 2.0 Video Generator module supports video and audio functional testing of HDMI 2.0 sink devices at TMDS characters rates up to 600MHz for testing ultra high definition HDTVs with 4K x 2K resolutions running at 60Hz.

### 5. 980 HDMI 2.0 Protocol Analyzer module (p/n 95-00112)

The 980 HDMI 2.0 Protocol Analyzer module supports video and audio functional and compliance testing of HDMI 2.0 source devices at TMDS characters rates up to 600MHz for testing ultra high definition sources that can output 4K x 2K resolutions running at 50/60Hz.

### 6. 980 DP 1.2 Video Generator module (p/n 95-00103)

The 980 DP1.2 Video Generator module supports video functional testing at link rates up to 5.4Gb/s with 1, 2, or 4 lanes for testing high-end displays.

## **Module Configurations and restrictions:**

Quantum Data2111 Big Timber



The following is a list of some of the module configuration restrictions for the 980B:

- HDMI 1.4 Protocol Analyzer & DP1.2 Video Generator can only be equipped in Slot 3 and Slot 6. The 980R can only accommodate two (2) of these modules total.
- VGA admin module is always equipped in Slot 4 and therefore this slot is unavailable for any other module.
- If there is an HDMI 1.4 Protocol Analyzer or DP1.2 Video Generator module in Slot 6, Slot 5 must be empty.
- Cannot equip an HDMI 2.0 Video Generator module in Slot 7 if there is an HDMI 1.4 Protocol Analyzer or DP1.2 Video Generator module are in Slot 6.
- If the platform is configured with an HDMI 1.4 Protocol Analyzer module, the HEAC board will be equipped in Slot 2. Otherwise this slot is unused.