



quantum data

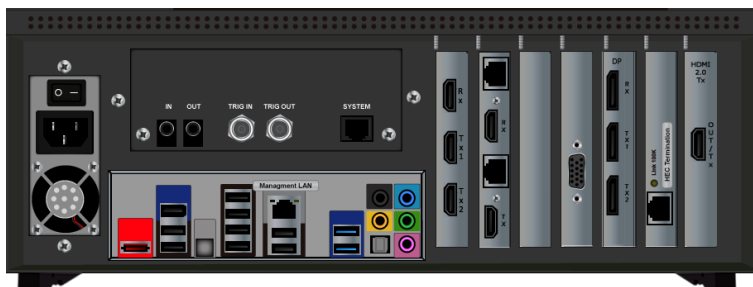
## 980R ADVANCED TEST PLATFORM

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

1. 980 HDMI Protocol Analyzer module (300MHz).
2. 980 HDMI Generator/Analyzer module (300MHz).
3. 980 MHL CBUS Compliance Test module.
4. 980 DP Video Generator module (HBR2 data rates).
5. 980 HDMI 2.0 Video Generator module (6G data rates).
6. 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 980R itself.

The 980R's built-in 7-inch color touch screen with 800 x 480 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.



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## 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, inframes 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 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 two (2) DisplayPort 1.2 outputs—both active simultaneously—for testing displays with multiple DisplayPort inputs. Future releases will offer analysis for testing DisplayPort 1.2 source devices.

**Color Touch Display**

Screen Size	7" Diagonal
Resolution	800 x 480 Col 24 bit RGB

**General Specifications**

Size (cm)	13.3(H) x 37.1(W) x 36.4(D)
Weight (kg)	10.39
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)**

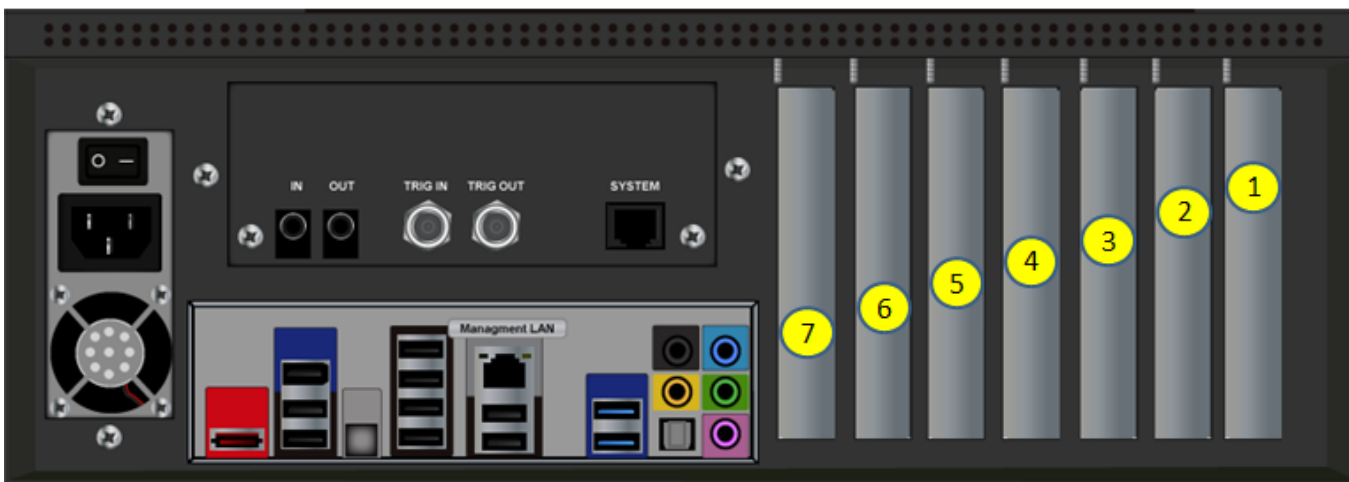
The 980 HDMI 2.0 Video Generator module supports video and audio functional testing of HDMI 2.0 sink devices at TMDS characters rates up to 600MHz for testing ultra high definition HDTVs with 4K x 2K resolutions running at 60Hz.

**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 (see notes below):****Notes on 980R configurations:**

- HDMI 1.4 Protocol Analyzer & DP1.2 Video Generator can only be equipped in Slots 1, 3 and 6. The 980R can only accommodate 3 of these modules total.
- VGA admin module is always equipped in Slot 2; therefore this slot is unavailable for any other module.
- You cannot have a module adjacent to any of the following modules on the lower slot number side: HDMI 1.4 Protocol Analyzer, DP1.2 Video Generator, HDMI 2.0 Video Generator. For example, if you have one of these modules in Slot 6, you cannot have a module in Slot 5.
- If the platform is not configured with an HDMI 1.4 Protocol Analyzer module, the auxiliary Ethernet board will not be equipped; therefore there is an additional slot available to accommodate either the HDMI 1.4 Video Generator module or the MHL CBUS compliance module.