Teledyne LeCroy — quantumdata Product Comparison

Feature	HDMI 1.4 Protocol Analyzer	HDMI 1.4 Generator / Analyzer	DisplayPort 1.4 Generator / Analyzer	DisplayPort 1.2 Generator / Analyzer	HDMI 2.0 Video Generator	HDMI 2.0 Protocol Analyzer	Phy & Protocol Aux Analyzer	12G-SDI Video Generator	804 Video Generator	804A Video Generator 300MHz	804B Video Generator 600MHz	780 Video Generator / Analyzer	780AH Video Generator / Analyzer	780BH Video Generator / Analyzer	780C Multi-Interface Interop Tester	780D Protocol Analyzer / Generator	780E Protocol Analyzer / Generator	Notes
Form Factor			•															**Notes on Form Factor**
Desktop	•	•	•	•	•	•	•	•	•	•	•							
System – Module-Based	•	•	•1	•	•	•	•	•										
Rack-Mountable	•1	•1		•1	•1	•1	•1	•1	•	•	•							1. Rack mountable when installed in 980R Test Platform.
Handheld												•	•	•	•	•	•	
Battery Powered												•	•	•				
Command and Control			•1															**Notes Command and Control**
Front Panel Touch Screen	•1	•1	•	•1	•1	•1	•1	•1	•	•	•	•	•	•	•2	•2	•2	1. Size of touch screen varies per Test System 980 (10"), 980B (15"), 980R (7")
GUI Application From Connected Host PC	•	•																
Command line – RS-232									•	•	•		•	•	•	•	•	
Command line – USB			•						•	•	•	•	•	•	•	•	•	2. Larger 7" touch screen
Command Line - Ethernet	•	•	•	•	•	•						•	•	•	•	•	•	
Interface Technology / Feature																		**Notes on Interface Technology /**
HDMI 225 MHz Tx Port	•1	•		•	•	•1	•		•	•	•	•	•	•	•	•	•	
HDMI 300 MHz Tx Port	•1			•	•											•	•	
HDMI 600 MHz Tx Port				•							•				•	•		
HDMI 225 MHz Rx Port	•	•			•	•	•		•	•	•	•	•	•	•	•	•	
HDMI 300 MHz Rx Port	•	•			•	•						•	•	•	•	•	•	
HDMI 600 MHz Rx Port					•										•	•		
MHL 1.2, 1.3, 1.4, 2.0, 2.1 & 2.2 Tx Port	•2	•2			•2													
MHL 1.2, 1.3, 1.4, 2.0, 2.1 & 2.2 Rx port	•2	•2			•2													1. Via capture and playback function.
DisplayPort 1.2 HBR2 Link Rates Tx Port			•	•													•	2. Supported on HDMI port using MHL/HDMI dongle.
DisplayPort 1.2 HBR2 Link Rates Rx Port				•													•	3. Supported on HDMI port using HDMI to DVI adapter cable.
DisplayPort 1.4 HBR3 Link Rates Tx Port			•														•	4. Supported on HDMI port using HDMI to HDBaseT converter.
DisplayPort 1.4 HBR3 Link Rates Rx Port			•														•	
DVI Single Link Tx Port	•1,3	•3			•3										•	•	•	
Single Link 3G-SDI 2.97 Gb/s Tx Port								•							•			
Single Link 3G-SDI 2.97 Gb/s Rx Port															•			
Single Link SDI Tx Ports: (HD, 3G, 6G, 12G-SDI)								•							•			
Dual Link SDI Tx Ports: (DL-HD, DL-3G)								•										
Quad Link SDI Tx Ports: (QL-HD, QL-3G-SDI)								•										
HDBaseT 300 MHz Tx Port	•4	•4			•4				•4	•4	•4	•4	•4	•4	•	•	•	
HDBaseT 300 MHz Rx Port	•4	•4				•4						•4	•4	•4	•	•	•	
Compliance Test Support																		**Notes on Compliance Test Support**
HDCP 1.4 HDMI Source Compliance Test	•																	
HDCP 2.2 HDMI Source, Sink, Repeater	•		•			•												
HDCP 2.2 DP Source, Sink, Repeater Compliance				•														
HDCP 1.4 MHL Source, Sink, Repeater Compliance	•1																	
HDMI 1.4 TMDS Source Compliance Test	•3																	
HDMI 1.4 TMDS Sink Compliance Test	•3																	
HDMI 1.4 TMDS DDC Source, Sink Compliance							•											1. Via HDMI/MHL dongle.
HDMI 2.0 TMDS Source Compliance Test	•2,3				•2,3													2. Industry approved test solutions.
HDMI 2.0 TMDS Sink Compliance Test	•2,3					•2,3												3. Refer to datasheets for supported tests.
MHL 1.2, 1.3, 1.4, 2.0, 2.1 & 2.2 Source, Sink	•1,2																	
MHL CBUS 1.2, 1.3, 1.4, 2.0, 2.1 & 2.2 Compliance																		
HDMI 2.0 CEC Compliance Test																		
HDMI 2.0 HDR Compliance Test Source						•												
HDMI 2.0 HDR Compliance Test Sink					•													
HDMI UHDA Compliance Test Source						•												
HDMI UHDA Compliance Test Sink					•													
Functional Tests (Sources)			•2															**Notes on Source Functional Tests**
Real Time Data Viewing – Timing, Metadata, Video	•	•	•2	•2		•1						•	•	•	•	•	•	
Capture/Store - Detailed Protocol, Metadata, Video	•		•2	•2		•1												
EDID Emulation – Test Source Response	•		•	•2		•1						•	•	•	•		•	
DP DPCD Emulation and Editing			•	•													•	
DP Multi-Stream Transport Emulation				•														1. Supports HDMI 2.0 testing up to 600MHz.
HDMI HDCP 1.4 – Verify Authentication	•	•				•						•	•	•	•	•	•	2. Supports DP 1.2 testing up to HBR2 bit rates.
HDMI HDCP 2.2 – Verify Authentication	•		•4			•						•	•	•	•	•	•	3. HDMI only.
Monitor HDMI DDC, CEC Bus & DP Aux Chan w/	•3	•3		•4		•3						•3	•3	•3	•3	•3	•3	4. DisplayPort only.
Timing Analyzer – Verify Timing (Snapshot)		•		•		•												5. Limited support.
Timing Analyzer – Verify Timing (Continuous)	•																	
Frame Compare Test for Far End Network Test	•											•	•	•	•	•	•	
TMDS Passive Monitor with Encrypted Link	•																	
HDMI HDR Function Tests																•5	•5	
Functional Tests (Sinks)			•															**Notes on Sink Functional Tests**
Video Pattern Testing	•1	•	•	•	•			•	•	•	•	•	•	•	•	•	•	
Audio Signals – General LPCM Audio Tones	•1	•	•	•	•			•	•	•	•	•	•	•	•	•	•	
Audio Signals – General Compressed Audio	•1	•	•	•	•				•	•	•	•	•	•	•	•	•	
EDID Verification – View EDID Content	•	•	•		•				•	•	•	•	•	•	•	•	•	
DP DPCD Verification – View DPCD Registers			•3	•														
HDMI / HDBaseT / DP HDCP 1.4 Authentication	•2	•2	•3	•3	•2				•2	•2	•2	•2	•2	•2	•2	•2	•2	1. Via capture and playback function.
HDMI / DP HDCP 2.2 Authentication Test	•2		•3		•2						•2		•2	•2	•	•	•	2. HDMI only.
View HDMI SCDC Registers			•		•													3. DisplayPort only.
DP Link Training Control, Monitoring and			•	•													•	
DP Multi-Stream Transport Verification			•3															
Monitor HDMI DDC, CEC Bus & DP Aux Chan with	•2	•2	•3	•2					•2	•2	•2	•2	•2	•2	•2	•2	•2	
HDMI CEC Message Verification & Emulation		•							•	•	•	•	•	•	•	•	•	
HDMI CEC Testing – Corrupt Bits, Timing, Ack, etc		•																
HDMI HDR Functonal Tests					•												•	
Functional Tests (Cables/Links)			•1															**Notes on Cables/Links) Functional**
Cable & Link Pixel Error Test (loopback)	•1											•1	•1	•1	•2	•2	•2	1. HDMI only.
Passive Monitor HDMI or DP Aux Channels	•1		•									•1	•1	•1	•1	•1	•2	2. HDMI and HDBaseT.