

# UCD-400

## DisplayPort™ 1.4a & HBR3 Video Generator and Analyzer



DP 1.4 LL CTS

HDCP 2.3 CTS

### Test 8K

UCD-400 is an 8K capable DisplayPort 1.4a & HBR3 video analyzer and generator. UCD-400 supports both hands-on debugging and running automated test sequences. UCD Console GUI is a preview and test application for desktop use. Each interface function has a well-structured dialog for superior at-a-glance viewability. Unigraf TSI is a test software API that enables automating of all tests, including the complicated compliance tests.

### Compliance Test Tool

UCD-400 is a VESA Certified Compliance Test Tool for testing 1.4a DP Link Layer including DSC on DP Sinks, Source and Branch. It is also a DCP Approved HDCP 2.3 Compliance Tests for Transmitters, Receivers and Repeaters.

### DSC & LTTPR Support

DSC feature is available as a software add-on to UCD-400. DSC feature includes both tools for encoding and decoding DSC content, which enables DSC CTS and related tests in DP Link Compliance Test tool.

UCD-400 is able to act as a DisplayPort source controlling the LTTPRs in the downstream signal path. LTTPR Test is a software addition for the UCD-400.

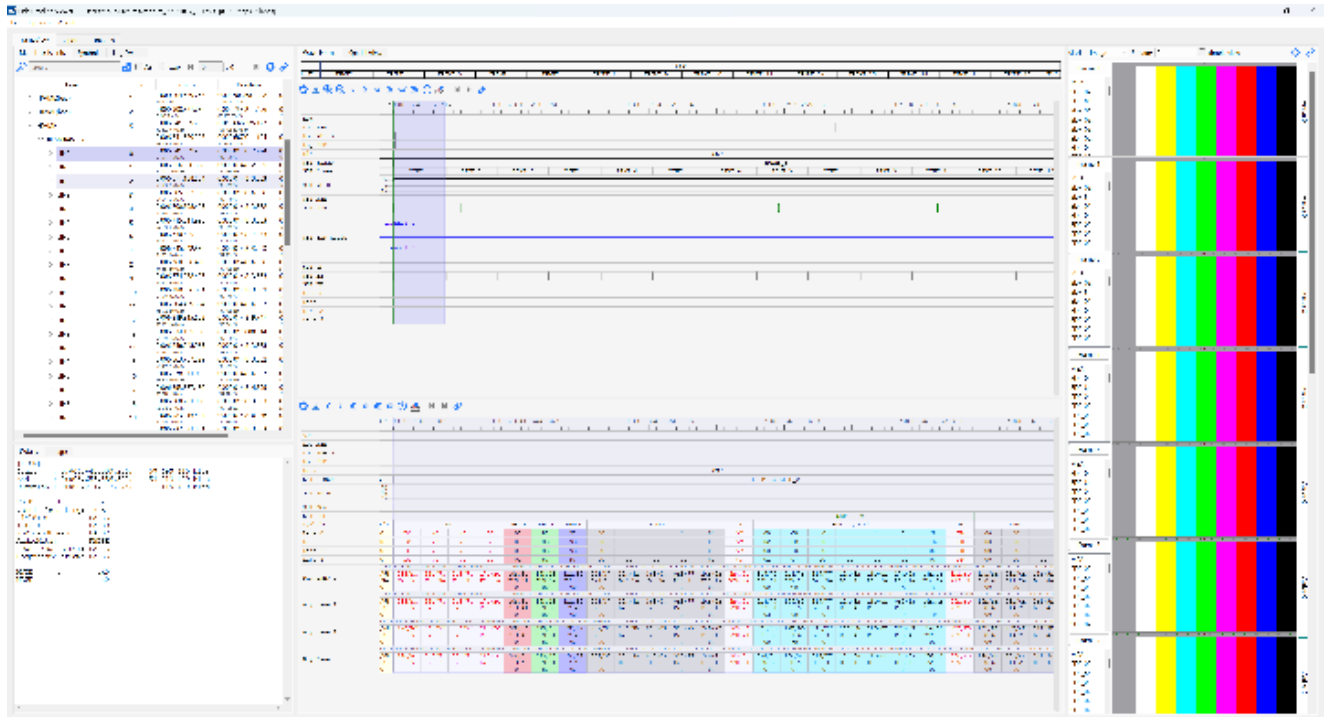
### Highlights

- VESA Certified DP 1.4a Link Layer CTS Test Tool
- DCP Approved HDCP 2.3 CTS Tool
- 8K and 4K Reference Sink, Source & Branch
- 8K@30Hz & 4K@120Hz support
- DP 1.4a / HBR3 input and output in one unit
- USB-C input and output with supplied converter cable
- MST support (4 streams)
- PanelReplay and ALPM (8b/10b)
- eDP support (PSR1/2, ALPM, 8b/10b)
- DSC, FEC and LTTPR support
- HDCP 1.3 and 2.3 support



# DP Link Analyzer

DisplayPort Link Analyzer is a tool for capturing Main-link Data Events and AUX Transactions. For each bulk capture, the data is parsed in a timeline view presenting the captured frames. Within each frame, users can have a deep view of the events and metadata that occurs in each line. Measure distances in nanoseconds and symbol size to identify the length of problems in between events. Observe descrambled and scrambled symbols in hexadecimal format in each of the active lanes



## Dolby Vision™, HDR 10 and HDR 10+

UCD-400 is capable of playback functionality on the source side to output HDR formats such as Dolby Vision™, HDR 10 and HDR 10+ for resolutions up to 8K@60 Hz. Playback of compressed audio formats including Dolby Atmos™ is supported. Dolby Laboratories provides users with Dolby Vision content.

Capturing video and SDP including audio packets provides the data for validation of HDR and Dolby Vision.

The test device makes for an ideal tool for developers of DisplayPort 1.4a compliant ASICs and devices like PCs, graphics cards, televisions, gaming monitors and VR/AR goggles that support HDR formats and want to have their products certified for Dolby Vision.

## Specifications

Input	DP 1.4a (8K@30 Hz / 4K@120 Hz)
Output	DP 1.4a (8K@30 Hz / 4K@120 Hz)
Content Protection	HDCP 2.3, HDCP 1.3
DSC Capability	DSC sink with off-line decompression DSC source using pre-compressed content DSC 1.2a support Support RGB / YCbCr up to 12 bits per component 24 slices, max width 7680 pixels Up to 8K@60 Hz
Additional features	MST FEC, LTTPR DP 1.4a LL CTS HDCP 2.3 CTS
Computer Interface	USB 3.0
Operating System	Windows, Linux, macOS
Software	UCD Console GUI TSI API with interface specific Test Sets
Power Input	+12 Vdc (AC/DC converter included)
Module Size	272 x 170 x 60 mm
Weight	1.2 kg

