# **UCD-411**

## DisplayPort<sup>™</sup> 1.4a & HBR3 Video Generator



#### Generate 8K

UCD-411 is a video generator unit for testing DisplayPort™ sinks up to 8K@60 Hz (with DSC), 8K@30 Hz and 4K@120 Hz video modes with HBR3 max bit rate capability. It is a flexible and robust tool either via a GUI on a laboratory desktop or via automated functional tests. The associated software provides the user access to the vital parameters and controls needed when evaluating the various functions of the interface.

#### For R&D and Test Automation

UCD-400 supports both hands-on debugging and running extended 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 provides the system integrator a fast and reliable way for ensuring the functionality of the tested equipment.

#### **Validation Tool**

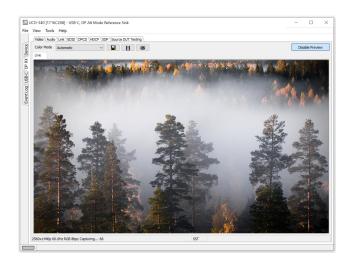
UCD-411 is a Compliance Test Tool for testing DP 1.4a Link Layer on DP Sinks and HDCP 2.2 & 2.3 on DP Receivers. The unit supports FEC, DSC and LTTPR.

#### Highlights

- DP 1.4a Link Layer CTS Tool for Sinks
- HDCP 2.2 & 2.3 CTS Tool for Receivers
- 8K and 4K Reference DP Source
- DP 1.4a features:
  - » HBR3 output
  - » MST support (4 streams)
  - » DSC, FEC and LTTPR support
- USB-C output with supplied converter
- HDCP 1.3, 2.2 and 2.3 support



# UCD-411 4K DisplayPort and HDMI Video Analyzer



#### **UCD Console GUI**

UCD Console is Unigraf's common Graphical User Interface (GUI) for all UCD series products. UCD Console is available for Windows, Linux and macOS operating systems. UCD Console enables users to access all test features of the UCD-400. It provides users with a flexible way of navigating between its sink and source roles and functionalities of each role.

Available functionalities include preview windows for captured video and audio, video and audio pattern generator, data logger for AUX and metadata content, link and DPCD register monitoring and control dialogs, EDID editor, HDCP status and control functions etc.

### **Specifications**

Output DP 1.4a (8K@60 Hz (with DSC) / 8K@30 Hz

/ 4K@120 Hz)

Content Protection HDCP 2.3, HDCP 2.2, HDCP 1.3

DSC Capability 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 2.2/2.3 CTS

Computer Interface USB 3.0

Operating System Windows 10, 8 and 7

Software UCD Console GUI

TSI API with interface specific Test Sets +12 Vdc (AC/DC converter included)

Module Size 272 x 170 x 60 mm

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Weight 1.2 kg

**Power Input** 



