

UCD-424

USB-C DisplayPort Alt Mode Test Unit DP 1.4a, HBR3 & PD 3.0



DP 1.4 LL CTS

HDCP 2.3 CTS

Test 8K

UCD-424 is an interface test unit for verifying DisplayPort™ Alternate mode over USB-C™ up to 8K@30 Hz and 4K@120 Hz video modes. The device gives you control for USB-C data and power roles. 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-424 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.

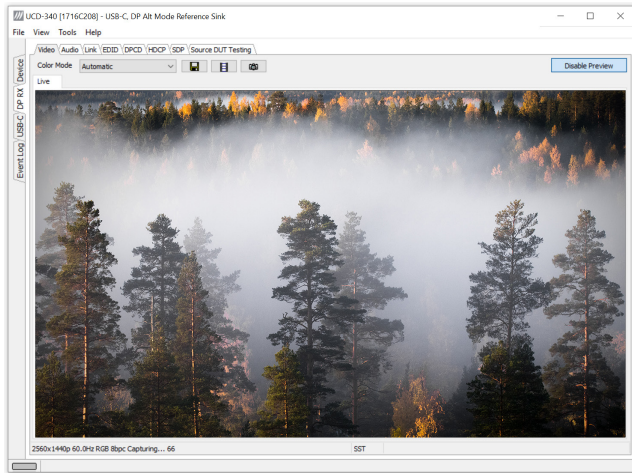
Compliance Test Tool

UCD-424 is a Compliance Test Tool for testing DisplayPort 1.4a Link Layer CTS on Sinks and Sources. The device is also capable of HDCP 2.2 and 2.3 CTS on Transmitters and Receivers. The unit supports FEC, DSC Sink and LTTTPR. Please contact Unigraf for details.

Highlights

- 8K and 4K Reference Sink & Source
- DP 1.4a Link Layer CTS for Sinks & Sources
- HDCP 2.3 CTS for Transmitters & Receivers
- DP 1.4a features:
 - » Up to HBR3 simultaneous input and output in one unit
 - » DSC Sink & Source with off-line encoding and decoding
 - » FEC and LTTTPR support
 - » MST support (4 streams)
- USB-C v1.3 with Power Delivery 3.0
 - » DP Alt Mode
 - » Capable to sink & source 9V@3A
 - » PD Role swaps supported
- USB3.2Gen2 (10Gbit/s) bypass between test interfaces
- HDCP 1.3 and HDCP 2.3 support

UCD-424 USB-C DP Alt Mode Test Unit with DP 1.4a, HBR3 & PD3.0



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-424. 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

Input	USB-C & PD 3.0 compliant DRP port with DP 1.4a Alt Mode Receiver capability (8K@30 Hz / 4K@120Hz)
Output	USB-C & PD 3.0 compliant DRP port with DP 1.4a Alt Mode Transmitter capability (8K@30 Hz / 4K@120 Hz)
USB Pass Through	USB3.2 Gen2 data pass-through between test interfaces
Vbus Power	Up to 3A@9V input and output
Content Protection	HDCP 1.3, 2.2, and 2.3
DSC Capability	DSC 1.2a sink with off-line decompression DSC 1.2a source using pre-compressed content Support RGB / YCbCr up to 12 bits per component 24 slices, max with 7680 pixels Up to 8K@60 Hz
Additional features	MST*, FEC*, LTTPR* DP 1.4a LL CTS, DP DSC CTS HDCP 2.3 CTS
Computer Interface	USB 3.0
Operating System	Windows 10, 8 and 7 macOS*, Linux* and Asterix* available Q2/20
Software	UCD Console GUI TSI API with interface specific Test Sets
Power Input	+12 Vdc (AC/DC converter included)
Module Size	310 x 190 x 61 mm
Weight	1.3 kg w/o power supply

*) Please contact Unigraf for detailed availability

