UCD-301 Digital
USB connected video test module for digital video and audio outputs

4K Frame Grabber
UCD-300 series is a family of UHD / 4K compliant display interface test devices utilizing the high speed USB 3.0 interface. They provide a flexible and robust way of testing the functionality of HDMI and DisplayPort® interfaces either on a laboratory desktop or via automated functionality tests. The associated software provide 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-300 software 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. The tests included in the Test Sets cover typical failure modes of each interface.

Test All Features
UCD-301 Digital enables testing all aspects of HDMI 2.0, DP 1.2 and S/PDIF source devices, including the electrical signal levels. You can also monitor and store video and audio, control and set link parameters, edit EDID, etc.

Highlights
- UHD / 4K compliant test equipment
- HDMI 2.0 and DP 1.2 inputs in one
- DCP Approved HDCP 2.3 CTS Test Tool
- HDCP 1.3 and HDCP 2.3 support
- Capture video and audio, monitor configuration parameters
- Verify interface signal levels with unique Electrical Test
- USB 3.0 connected
- UCD Console GUI for debugging
- High level API for easy integration

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UCD Console GUI

The UCD-300 graphical user interface for R&D debugging is called UCD Console. It provides the user a flexible way of navigating between the interface based Roles of the device and the functionalities of each Role.

UCD Console features preview windows for the received video and audio, monitoring and controls for the link parameters and an EDID editor. UCD Console also provides access to the state and control of HDCP function.

High Level Test Functions

Unigraf high level test software interface TSI (Test System Interface) provides the System Integrator a set of reliable and short cycle time interface specific tests. TSI readily implements the low level procedures needed for verifying the various functions of the tested interface and the required software integration is minimal.

Electrical Tests

With UCD-301 Digital, the tester can also verify the electrical continuity of each signal in the HDMI and DisplayPort interface. The TSI test automation routine allows the calling application to set the target limits. TSI provides the result both as Pass / Fail and the actual measured value.

Specifications

- **Inputs**: DP 1.2 (4096×2160p60 max)  
  HDMI 2.0 (4096×2160p60 max)  
  S/PDIF audio (192 kHz max)
- **Content Protection**: HDCP 1.3 / 1.4  
  HDCP 2.3
- **Electrical Test**: Verify signal levels of all HDMI and DP interface signals.
- **Computer Interface**: USB 3.0
- **Operating System**: Windows 10, 8, 7 and XP
- **Software**: UCD Console GUI  
  TSI API with interface specific Test Sets
- **Power Input**: +12 Vdc (AC/DC converter included)
- **Module Size**: 281×128×62 mm
- **Weight**: 900 g (w/o AC/DC converter)

All specifications subject to change without notice.