UCD-500

DisplayPort™ 2.0 • 16K Video Generator & Analyzer

16K UHD

16K Video Generator & Analyzer

UCD-500 is a video generator and analyzer unit for testing DisplayPort™ 2.0 Sinks and Sources up to 8K@60Hz (16K@60 Hz with DSC) video modes with UHBR 20 Max Bit Rate Capability. UCD-500 support DP 2.0 features like Panel Replay, Adaptive Sync, DSC, FEC and LTTPR.

Validation Tool

UCD-500 is a Compliance Test Tool for validating DP 1.4a & DP 2.0 Link Layer on DP Sinks and Sources. DP 2.0 Link Layer CTS will be added when VESA releases compliance test specification. It is also a Compliance Test Tool for HDCP 2.2/2.3 on DP Transmitters, Receivers and Repeaters.

HDR support

The unit is capable of playback functionality on source side to output HDR formats such as Dolby Vision™, HDR 10 and HDR 10+ for resolutions up to 16K@60 Hz.

The test device makes for an ideal tool for developers of DisplayPort 2.0 compliant ASICs and devices like PCs, graphics cards, gaming monitors and VR/AR goggles that support HDR formats.

Specifications

Input/Output	USB-C, DP
DisplayPort	Version 2.0, 10 Gb rate max capability
USB-C	20Gb rate max capability
	Power Delivery 3.0
	Capable to sink & source 9V@3A
	PD Role swaps supported
Link	1,2 and 4 lanes at 1.62, 2.7, 5.4, 8.1, 10, 13.5 and 20 Gbps link rates
Video	8K60Hz, 16K60Hz (with DSC)
Color Depth	6 to 16bpc
Color Formats	RGB, YCbCr 444, 422, 420, Raw, Y-only
HDR Formats	Dolby Vision, HDR 10, HDR 10+
Audio	8ch LPCM, Dolby Atmos
Compression	DSC 1.2a
Content Protection	HDCP 2.2/2.3 and 1.3
Additional features	MST, LTTPR Panel Replay, Adaptive Sync DP 1.4a LL CTS, HDCP 2.2/2.3 CTS DP 2.0 LL CTS (after specification release)
Capture Memory	16GB
Computer Interface	USB
Operating System	Windows, MacOS, Linux
Software	UCD Console GUI TSI API with interface specific Test Sets
Power Input	+24 Vdc (AC/DC converter included)
Module Size/Weight	331mm x 197 mm x 66 mm
Weight	1.9 kg

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All specifications subject to change without notice.