4K HDMI & USB Extender Kit over HDBaseT 2.0 with PoH
EX-100-KVM

WyreStorm

Specification Sheet

Transmitter — Status LED — HDBT Output to Receiver — HDMI Input — USB Host Input — 12V Power Input with threaded bushings — RS-232 Pass-Through — Audio Input/Output

Receiver — Status LED — RS-232 DIP Switch — HDBT Input to Transmitter — HDMI Output — USB Device Ports — 12V Power Input with threaded bushings — RS-232 Pass-Through and Firmware Upgrade — Audio Output

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Introduction

The EX-100-KVM is a professional-grade HDBaseT 2.0 extender kit designed for long-distance transmission of 4K and 1080p HDMI video, USB 2.0 signals (190Mbps), audio, PoH, and control. It features a transmitter (TX) and receiver (RX) combo that allows extension of uncompressed video and high-speed data up to 100m over a single Cat6/6a/7 cable. Ideal for applications requiring reliable KVM functionality, such as conference rooms, control centers, and education environments.

Key Features

• USB host/device connectivity offering data transfer capability of 190Mbps for connection of smart whiteboards, webcams or touchscreens
• Powerful HDBaseT 2.0 chipset supports delivery of 4K HDR video, stereo HD audio, bidirectional RS-232, CEC pass-through and USB 2.0
• 100-meter transmissions using Cat6a or higher
• Includes analog audio pass-through and audio de-embedding from the HDMI signal and PoH (TX>RX) for flexible and convenient installation

In the Box

1x Extender Set
1x DC 12V 3A Power Supply (US/EU/UK/AU)
4x Mounting Brackets with Screws
2x 3-pin 3.5mm Phoenix Connectors
1x Quickstart Guide

Specifications

Audio and Video	
Input/Output Ports	**Transmitter:** 1x HDMI IN, 1x HDBT OUT, 1x RS232, 1x AUDIO IN, 1x AUDIO OUT, 1x USB HOST, 1x DC 12V IN **Receiver:** 1x HDBT IN, 1x HDMI OUT, 1x RS232, 2x AUDIO OUT (One for De-embed and another one for Pass-through), 4x USB DEVICE, 1 x DC 12V IN
Input/Output Signal Type	**Transmitter:** Input: HDMI 1.4 with 4K@60Hz 4:2:0 8bit, HDCP 2.2 Output: HDBT 2.0 **Receiver:** Input: HDBT 2.0 Output: HDMI 1.4 with 4K@60Hz 4:2:0 8bit, HDCP 2.2
Supported Resolution	**VESA:** 800×600^{8}, 1024×768^{8}, 1280×768^{8}, 1280×800^{8}, 1360×768^{8}, 1366×768^{8}, 1440×900^{8}, 1600×900^{8}, 1600×1200^{8}, 1680×1050^{8}, 1920×1200^{8} **SMPTE:** $1280\times720P^{1,2,3,4,5,6,7,8}$, $1920\times1080I^{6,8}$, $1920\times1080P^{1,2,3,4,5,6,7,8}$, $3840\times2160^{2,3,5,6,8}$, $4096\times2160^{2,3,5,6,8}$ 1 = at 23.98 Hz, 2 = at 24 Hz, 3 = at 25 Hz, 4 = at 29.97 Hz, 5 = at 30 Hz, 6 = at 50 Hz, 7 = at 59.94 Hz, 8 = at 60 Hz **NOTE:** 4096x2160/3840x2160@50Hz/60Hz is based on chroma sub-sampling 4:2:0 8-bit only
Output Video Encoding	HDBaseT Class C
Encoding Data Rate	10.2Gbps
End to End Latency	10μs (micro seconds)
Supported Standards	DCI | RGB | HDR | HDR10 | Dolby Vision up to 30Hz | HLG | BT.2020 | BT.2100
Maximum Pixel Clock	340MHz
Audio Formats	**HDMI:** Supports multi-channel audio formats, including PCM 2.0/5.1/7.1, Dolby TrueHD, Dolby Atmos, DTS-HD Master Audio and DTS:X **AUDIO IN/OUT:** Stereo

Transmission Distance	**Cat 5e:**	100m/330ft	1080p@60Hz	
		90m/295ft	4K@30Hz 4:4:4, 24bpp 4K@60Hz 4:2:0, 24bpp	
	Cat 6/6A/7:	100m/330ft	4K@30Hz 4:4:4, 24bpp 4K@60Hz 4:2:0, 24bpp 3840x2160p @30Hz 12bit 4:2:2 HDR	

Communication and Control	
HDMI	HDMI | HDCP 2.2 | EDID | CEC Pass-through | DVI/D supported with adapter (not included)
HDBaseT	HDMI | HDCP 2.2 | EDID | Line Audio | 1-way PoH (TX powers RX) | Bidirectional RS-232 | CEC
RS-232	1x RS-232: 3-pin Phoenix (Transmitter and Receiver)
USB	1x Type B (host) | 4x Type A (device) Maximum uplink speed: 190Mbps

Power	
Power Supply	DC 12V/3A
Power Consumption (Maximum)	19W

Environmental	
Operating Temperature	0°C to 45°C (32°F to 113°F)
Storage Temperature	-20°C to 70°C (-4°F to 158°F)
Humidity	10% to 90%, non-condensing
ESD Protection	Human-body Model: ±8kV (Air-gap discharge) / ±4kV (Contact discharge)

Dimensions	
Height	17mm / 0.67in
Width	136mm / 5.35in
Depth	85mm / 3.35in
Weight	**Transmitter:** 0.44kg/0.97lb **Receiver:** 0.48kg/1.06lbs

Regulatory	
Safety and Emission	CE | FCC | RoHS | RCM | EAC | UKCA

Note: WyreStorm reserves the right to change product specification, appearance or dimensions of this product at any time without prior notice.