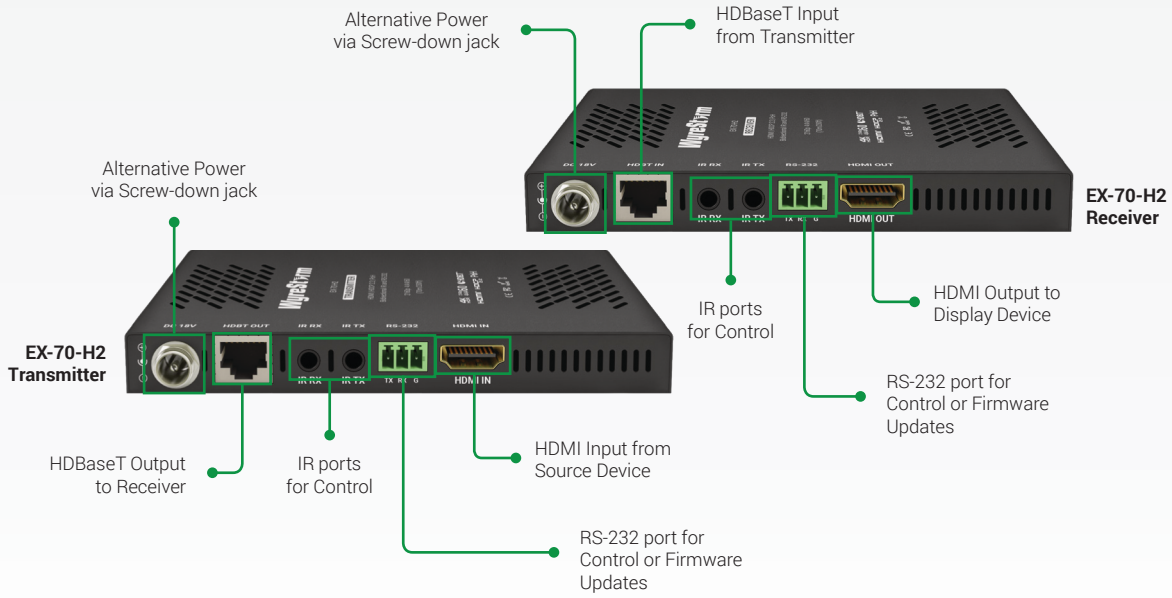
18Gbps 4K HDR HDBaseT Extender with HDCP 2.2 and 2-way PoH

EX-70-H2 v2

WyreStorm

Specification Sheet



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Introduction

Part of the latest generation of WyreStorm 4K extenders for the latest generation of 4K HDR content, the EX-35-H2 features dynamic compression technology to enable high frame rate HDR-10 and HLG content to be transmitted over standard 10Gbps HDBaseT, both visually losslessly and without latency.

Key Features

- 4K UltraHD extender set capable of transmitting AV content over medium distances using single cable Cat6 cable
- HDBaseT™ Class B transmission of 4K HDR up to 70m/230ft and 1080p @60Hz 36bit up to 100m/328ft
- Full UHD 4K transmission supporting HDMI 2.0 video standards
- Supports all high definition resolutions including 4K HDR @60Hz 4:2:0 10bit - see specifications for details
- Revised chipset increases compatibility with new 4K UHD source devices
- Transmits discreet wide-band bidirectional IR/RS-232 control signals together with HDMI over a single Cat5e/6 cable
- Low profile chassis of 15mm for easier, more convenient installations behind screens at display zones
- Supports 2ch PCM and 7.1 multichannel audio up to DTS-X and Dolby Atmos
- 2-way PoH (Power over HDBaseT™) enables either transmitter or receiver to be remotely powered by the other locally powered so mains power connectivity is not required at both source and display location
- HDCP 2.2 compliant
- 3D compatible
- Switchable RS-232 function mode on transmitter and receiver for firmware update
- Threaded bushings allow use of both standard and locking DC power plugs
- Visual LED indication for power, display connection signal status, HDBaseT™ link, and HDCP presence in signal
- Cable termination follows IEEE-568B standards
- Automatically adjusts feedback, equalization and amplification of signal for easy installation
- Energy efficient universal power supply included

In the Box

1x EX-70-H2 Transmitter
1x EX-70-H2 Receiver
1x IR Emitter
1x IR Receiver
2x 3-pin Terminal Block
1x 18V DC 1A Power Supply (US/UK/EU/AU)
4x Mounting Brackets (2x for TX | 2x for RX)
1x Quickstart Guide

Note: This product has been released in multiple versions which have different feature sets and/or chassis designs. The differences are identified throughout this document where applicable.

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Specifications

	Transmitter		Receiver	
Audio and Video				
Inputs	1x HDMI In: 19-pin type A		1x HDBT In: 8-pin RJ-45 Female	
Outputs	1x HDBT Out: 8-pin RJ-45 Female 1x HDMI Loop Out: 19-pin type A		1x HDMI Out: 19-pin type A	
Output Video Encoding	HDBaseT Class A			
Encoding Data Rate	9.2Gbps			
End to End Latency (Max)	10µs (micro seconds)			
Audio Formats	2ch PCM | Multichannel up to DTS-X and Dolby Atmos			
Video Resolutions (Max)	**Video Resolution**	**HDMI**	**Cat6**	**Cat6a/7**
	1920x1080p @60Hz 12bit	15m/49ft	100m/328ft	100m/328ft
	1920x1080p @60Hz 16bit	7m/23ft	100m/328ft	100m/328ft
	3840x2160p @24Hz 10bit 4:2:0 HDR	3m/10ft	70m/230ft	100m/328ft
	3840x2160p @30Hz 8bit 4:4:4	7m/23ft	70m/230ft	100m/328ft
	3840x2160p @60Hz 10bit 4:2:0 HDR	3m/10ft	70m/230ft	70m/230ft
	4096x2160p @60Hz 8bit 4:2:0	7m/23ft	70m/230ft	100m/328ft
	4096x2160p @60Hz 8bit 4:4:4	7m/23ft	70m/230ft	100m/328ft
	Note: WyreStorm recommends the use of shielded category cable to minimize signal noise and interference			
Supported Standards	DCI | RGB | Dolby Vision @ 30Hz | HLG | HDR-10			
Maximum Pixel Clock	HDMI: 600MHz | HDBaseT: 297MHz			
Communication and Control				
HDMI	HDMI | HDCP 2.2 | EDID | DVI/D supported with adapter (not included)			
HDBaseT	HDMI | HDCP 2.2 | EDID | 2-way PoH | Bidirectional IR, and RS-232			
CEC	CEC Pass-through – Requires CEC compatibility between source and display			
IR	1x IR TX: 3.5mm (1/8in) TS Mono | 1x IR RX: 3.5mm (1/8in) TRS Stereo			
RS-232	1x RS-232: 3-pin Terminal Block			
Power				
Power Supply	18V DC 1A			
PoH	IEEE 802.3af 48V 15.4W Max | 2-way			
Max Power Consumption	4.68W		6.84W	
Environmental				
Operating Temperature	0 to + 45°C (32 to + 113 °F), 10% to 90%, non-condensing			
Storage Temperature	-20 to +70°C (-4 to + 158 °F), 10% to 90%, non-condensing			
Maximum BTU	16 BTU/hr		24 BTU/hr	
Dimensions and Weight				
Rack Units/Wall Box	<1U			
Height	21mm/0.83in			
Width	210mm/8.27in			
Depth	94.8mm/3.74in			
Weight	0.24Kg/0.53lbs			
Regulatory				
Safety and Emission	CE | FCC | RoHS | RCM			