

**48Gbps 8K/60 HDR 4:4:4 Active Optical HDMI Cable |  
eARC, CEC, ALLM & VRR | ISF Certified (10m/33ft | 15m/49ft)  
CAB-HAOC-FRL-10 | CAB-HAOC-FRL-15**



4320p **60** **8K** **HDMI** **HDCP** e-ARC  
4:4:4 48GBPS 2.3

*WyreStorm - Powerful. Reliable. Simple.*

## Introduction

The WyreStorm HAOC is a next generation HDMI cable designed for the next generation of 8K and 4K HDR content. Now established as the most powerful form of HDMI extension, WyreStorm active optical cables offer the best of both worlds: pixel-perfect long distance transmission of content and native HDMI communication, thanks to their ability to be a passive communication technology compared to HDBaseT extenders that often terminate the HDMI signal prior to transmission. Looking ahead to the next generation of content crossing into the HDMI2.1 specification, WyreStorm FRL hybrid optical HDMI cables have been designed ready for both content available now and that of the future.

8K and high framerate 4K HDR up to 48Gbps and new HDR standards such as SL-HDR1 and PQ are supported using the latest optical transmission technology. Additionally they offer a unique feature set in both delivering uncompressed HDMI content and compatibility with emerging HDMI technologies such as ALLM (Auto Low Latency Mode) & VRR (Variable Refresh Rate).

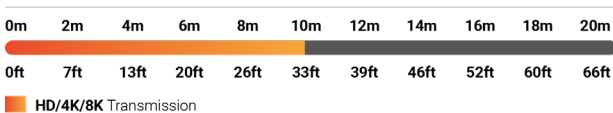
## Key Features

- Uncompressed optical transmission of HDMI content up to 48Gbps:
  - 2K (2560 x 1440p) 240Hz
  - 4K (4096 x 2160p) 144Hz
  - 5K (5120 x 2880p) 60Hz
  - 8K (7680 x 4320p) 60Hz
  - Timings listed are quoted as 4:4:4 8-bit
- Compatible with all current and emerging HDR standards:
  - HLG (Hybrid Log Gamma)
  - HDR-10 and HDR-10+
  - Dolby Vision
  - PQ (Perceptual Quantizer)
  - SL-HDR-1
- Ready for future HDCP 2.3 content encryption
- Compatible with new eARC HD audio standard for on-demand content from smart TV's
- Supports HDMI2.1 FRL (Fixed Rate Link) 16/18b encoding and DSC (Display Stream Compression)
- True native HDMI communication ensures CEC and audio return communication between compatible devices
- Supports new HDMI2.1 features such as ALLM (Auto Low Latency Mode) and VRR (Variable Refresh Rate)
- Perfect for use in environments with excessive EM or RF interference
- Kevlar protected communication cores
- High quality aluminium construction with low-profile 20mm/0.79" TX head
- Supplied coiled on cardboard spool in box, with RX head out first.
- No single use plastic included\* #SUPFree
- Also available in 15m/49ft length

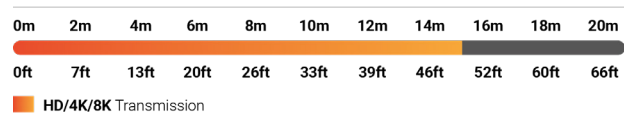
## In the Box

- 1x CAB-HAOC-FRL-10 or CAB-HAOC-FRL-15 Active Optical HDMI Cable
- 2x Reusable Cable Ties
- 1x Quickstart Guide

Optical HDMI Cable Performance Guide



Optical HDMI Cable Performance Guide



# Specifications

<b>Transmission</b>			
<b>Transmission Encoding</b>	Uncompressed AOC (with DSC support between Source-Display when required)		
<b>End to End Latency</b>	10µs		
<b>Maximum Transmission Bit Rate</b>	48Gbps (4-core, 12Gbps per lane)		
<b>Video</b>			
<b>HDMI</b>	(v2.0b) TMDS   600MHz Maximum   (v2.1) FRL (Fixed Rate Link)   16b/18b encoding DSC (Display Stream Compression) Supported		
<b>Input</b>	1x HDMI: 19-pin type A Male		
<b>Output</b>	1x HDMI: 19-pin type A Male		
<b>Maximum Data Rate</b>	42.6 Gbps		
<b>Supported Video Resolutions</b>		<b>CAB-HAOC-FRL-10</b>	<b>CAB-HAOC-FRL-15</b>
	1920 x 1080p @240Hz		
	2560 x 1440p @240Hz		
	4096 x 2160p @144Hz	10m/33ft	15m/49ft
	5120 x 2880p @60Hz 7680 x 4320p @60Hz		
<b>Supported Standards</b>	DCI   Static HDR   HDR10+   Dolby Vision   HLG   SL-HDR1   PQ   BT.2020   BT.2100		
<b>Audio</b>			
<b>Audio Formats</b>	2ch PCM   Multichannel LPCM   DTS-X   Dolby Atmos		
<b>Maximum Sampling Rate</b>	192KHz		
<b>Maximum Audio Channels</b>	32		
<b>Enhanced Audio Return Channel (eARC)</b>	Supported		
<b>Communication and Control</b>			
<b>HDCP</b>	Pass-through, 2.3 Supported		
<b>EDID</b>	Pass-through, RX>TX		
<b>Ethernet</b>	100Mbps Supported		
<b>Consumer Electronics Control (CEC)</b>	Bidirectional Supported		
<b>Auto Low Latency Mode (ALLM)</b>	Supported		
<b>Variable Refresh Rate (VRR)</b>	Supported		
<b>Installation Restrictions</b>			
<b>Max Bend Radius</b>	2cm/0.78in		
<b>Max Pull Tension</b>	15kg/33lbs		
<b>Orientation</b>	Uni-directional - Observe signal flow direction prior to installation		
<b>Power</b>			
<b>Power Supply</b>	Passive 4.5v~5.5v VCC (From Connected Source)		
<b>Max Power Consumption</b>	250mW		
<b>Environmental</b>			
<b>Operating Temperature</b>	14°F ~ 122°F (-10°C ~ 50°C)   10% ~ 90%, non-condensing		
<b>Storage Temperature</b>	-4°F to ~ 140°F (-20°C ~ +60°C)   10% ~ 90%, non-condensing		
<b>Maximum BTU</b>	0.85 BTU/hr		
<b>Jacket Material</b>	PVC		
<b>Dimensions and Weight (Connector Housing)</b>			
<b>Height</b>	9mm/0.36in		
<b>Width</b>	19.8mm/0.78in		
<b>Depth</b>	39.5mm/1.56in		
<b>Weight</b>	NA		
<b>Cable Length (Connector to Connector)</b>	CAB-HAOC-FRL-10: 10m/33ft CAB-HAOC-FRL-15: 15m/49ft		
<b>Regulatory</b>			
<b>Safety and Emission</b>	CE   FCC   CL3   RoHS   EAC		

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