HDMI over IP Audio/Video Streaming over a Network





Extend HDMI Over IP to additional displays

HDMI over IP streams HDMI audio/video at up to a 4K resolution over a network or the Internet. Multiple configurations offer the flexibility to support a digital signage system, video wall, and point to point extension, including multi-view capabilities. H.264/H.265 technology has exceptionally low bandwidth requirements allowing streaming of audio/ video content over a local area network (LAN), over Wi-Fi[™], and over the Internet for distributed installations.



Applications

- Digital signage
- Video wall with multi-view
- A/V matrix switching
- Point-to-point extension

Verticals

- Retail & Restaurants
- Corporate
- Security
- Education

Configurations

- Point-to-multipoint
- Multipoint-to-point
- Multipoint-to-multipoint
- Point-to-point

HDMI over IP Encoder, Decoder and Controller

HDMI over IP Encoder

- Extends an HDMI audio/video signal over a network
- Supports an HDMI input video resolution up to 4K @ 30Hz
- Utilises low-bandwidth H.264/265 codec to broadcast audio/video over a LAN, WiFi or the Internet
- Stereo audio and directional IR inputs with a Serial RS232 control port
- Conveniently powered through PoE by a PoE(PSE) Ethernet switch

HDMI over IP Decoder

- Upscales HDMI output video resolution to 4K @ 60Hz (4:4:4)
- Supports S/PDIF (Toslink) and stereo audio ouput
- Directional IR output with a Serial RS232 control port for controlling remote devices
- Conveniently powered through PoE by a PoE(PSE) Ethernet switch



29975 HDMI over IP Encoder - 4K 30Hz



29976 HDMI over IP Decoder - 4K 60Hz



HDMI Over IP

Comparison of Competing Technologies

The HDMI over IP solution utilises the H.264/H.265 codec, making it ideal for multi-point streaming of video & images over a LAN or the Internet to support a digital signage system, video wall, or point-to-point extension.

This chart compares the specifications and requirements of H.264/H.265 to competing technologies.

	AV over IP (H.264/H.265)	HDBaseT	SDVoE		
	≥ 4K (compressed)	4K (compressed)	4K (uncompressed)		
Ethernet	≥ 1000BASE-T (1Gb/s)	100BASE-T (100Mb/s)	1000BASE-T (1Gb/s) 10GBASE-T (10Gb/s)		
Power	Up to 90W with PoE	Up to 100W with PoH	Up to 90W with PoE		
Infrastructure	Cat5E or better	Cat5E or better	Cat6a or better		
Typical Distance	Up to 100m between devices and network switch	Cat5E - 10m Cat6 - 40m Cat6a - 100m	Up to 100m between devices and network switch		
Transmission	Coexists with LAN	Separate connection/network	Coexists with LAN		
Video Packets	TCP/IP	T-Packets	TCP/IP		
Required Equipment	uired Equipment A/V over IP Encoder A/V over IP Decoder Ethernet Switch		SDVoE Encoder SDVoE Decoder Ethernet Switch		
Ideal Applications	Multi-point streaming of video & images over a LAN or the Internet	Point-to-point extension of video & images	Multi-point streaming of live video & broadcast over a LAN		





Network Controller for HDMI over IP

- Provides centralised setup, configuration, and control of a HDMI over IP system, including auto-discovery of devices
- Conveniently managed via web interface or smartphone control app
- Serves as a base platform to develop automation control applications
- Simplifies firmware updates through centralised management
- An available Application Program Interface (API) supports a number of third party partner control applications running on smartphones and tablets

C2G AVoIP Control Application

- Offers centralised control of C2G HDMI over IP products
- Supports virtual matrix and video wall configurations
- Easily manage multiple sites via graphical floor plans
- Provides virtual Handheld Remote for control of end devices
- Operates on Android and iOS Smartphones and Tablets



HDMI over IP in Application

- Ideal for video wall, digital signage, or point to point extensions
- Scalable matrix switching applications support over 600 sources and displays
- Serial RS232 and IR control signal support provides complete control of distributed A/V systems





HDMI over IP Products & Accessories









HDMI over IP

Part Code	Description
29975	HDMI over IP Encoder – 4K 30Hz
29976	HDMI over IP Decoder – 4K 60Hz
29977	Network Controller for HDMI over IP

Mounts

Part Code	Description
29983	Wall Mount Bracket Kit for HDMI over IP Extenders
29979	16-Port Rack Mount for HDMI over IP Extenders
29984	Blank Filler Plate for 16-Port Rack Mount
29985	Replacement Mounting Bracket for 16-Port Rack Mount

HDMI Cables

Premium High Speed HDMI

Part Code	Description
80981	0.9m Premium High Speed HDMI Cable with Ethernet - 4K 60Hz
80982	1.8m Premium High Speed HDMI Cable with Ethernet - 4K 60Hz
80984	3m Premium High Speed HDMI Cable with Ethernet - 4K 60Hz
80986	4.5m Premium High Speed HDMI Cable with Ethernet - 4K 60Hz

High Speed HDMI Cables with Gripping Connectors

Part Code	Description
82377	0.5m High Speed HDMI Cable With Gripping Connectors - 4K 60Hz
82378	1m High Speed HDMI Cable With Gripping Connectors - 4K 60Hz
82379	1.8m High Speed HDMI Cable With Gripping Connectors - 4K 60Hz
82380	3m High Speed HDMI Cable With Gripping Connectors - 4K 60Hz



Cat6 Cables

	Grey	Blue	Black	White	Red	Yellow	Orange	Purple	Green	Pink	Brown
0.3m	83364	83384	83404	83484	_	_	_	-	_	_	_
0.5m	83365	83385	83405	83485	83445	83465	83573	83630	83425	83587	83644
1m	83366	83386	83406	83486	83446	83466	83574	83631	83426	83588	83645
1.5m	83367	83387	83407	83487	83447	83467	83575	83632	83427	83589	83646
2m	83368	83388	83408	83488	83448	83468	83576	83633	83428	83590	83647
3m	83369	83389	83409	83489	83449	83469	83577	83634	83429	83591	83648
5m	83370	83390	83410	83490	83450	83470	83578	83635	83430	83592	83649

Available in lengths up to 100m



Application Solutions from Legrand | AV:





TiLED[™] LED Video Wall Mounting System

The TiLED LED Video Wall Mounting System is designed to support creative video wall configurations for a variety of Direct-View LED systems.

Impact[™] Kiosks

Impact Kiosks bring a new level of flexibility to the digital signage enclosure market while maintaining a sleek aesthetic to keep focus squarely on the content.





ConnexSys[™] Video Wall Mounting System

The ConnexSys Video Wall Mounting System solves common video wall challenges of speed, alignment, serviceability and rigidity to achieve a picture-perfect end result.





AV Series Gigabit PoE+

The AV Series Gigabit PoE+ Managed Switches are optimized for AV over IP, providing up to Gigabit bandwidth and Power over Ethernet (PoE+) ports.









BGR Series 23" Wide AV Enclosure

The #1 AV rack because it is both Forward and Lever Lock[™] compatible providing maximum mounting capacity on and off the rail and a suite of tool-free accessories making installation 5Xs faster; Standalone models also available.





RoboSHOT 20 & 40 UHD

The RoboSHOT 20 UHD and RoboSHOT 40 UHD are Ultra HD (4K) PTZ cameras with pristine image quality and outstanding low-light performance that pair with the C2G HDMI over IP Decoder for over-network A/V connectivity in large venue applications.



PROJECTA



Parallax® Thin

The Parallax Thin is a 3/8" bezel aluminum fixed frame that mimics the look of a television, and ships fully assembled for installation efficiency.*

*Compatible with the Chief XSM1U Wall Display Mount, XCM1U Single Pole Ceiling Mount and XCM7000 Dual Pole Ceiling Mount



FullVision

The FullVision is a borderless and low-profile fixed frame design providing an ultra-aesthetic look while offering installation flexibility with included mounting hardware.

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