# 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<sup>™</sup>, 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
- Utilizes 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 utilizes 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	A/V over IP Encoder A/V over IP Decoder Ethernet Switch	HDBaseT Transmitter HDBaseT Matrix HDBaseT Matrix Switch (optional)	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		



29977 Network Controller for HDMI over IP



### Network Controller for HDMI over IP

- Provides centralized 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 centralized 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 centralized 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
50181	3ft Premium High Speed HDMI Cable with Ethernet - 4K 60Hz
50182	6ft Premium High Speed HDMI Cable with Ethernet - 4K 60Hz
50184	10ft Premium High Speed HDMI Cable with Ethernet - 4K 60Hz
50186	15ft Premium High Speed HDMI Cable with Ethernet - 4K 60Hz

#### High Speed HDMI Cables with Gripping Connectors

Part Code	Description
29674	1.5ft High Speed HDMI Cable With Gripping Connectors - 4K 60Hz
29675	3ft High Speed HDMI Cable With Gripping Connectors - 4K 60Hz
29677	6ft High Speed HDMI Cable With Gripping Connectors - 4K 60Hz
29678	10ft High Speed HDMI Cable With Gripping Connectors - 4K 60Hz



### **Cat6 Cables**

	Grey	Blue	Black	Green	Red	Yellow	Orange	Purple	White	Pink
6in	00951	00952	00953	00954	00955	00956	00957	00958	00959	00960
1ft	27130	27140	27150	27170	27180	27190	27810	27800	27160	04043
2ft	03965	03973	03981	03989	03998	04007	04016	04025	04034	04044
3ft	27131	27141	27151	27171	27181	27191	27811	27801	27161	04045
4ft	03966	03974	03982	03990	03999	04008	04017	04026	04035	04046
5ft	31340	31341	31342	31344	31345	31346	31348	31347	31343	04047
6ft	03967	03975	03983	03991	04000	04009	04018	04027	04036	04048

Available in lengths up to 150ft

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# **Application Solutions from Legrand | AV:**





#### TiLED<sup>™</sup> 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<sup>™</sup> 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<sup>™</sup> 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.

# LUXUL



#### 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.







#### **Compact Premium+ PDU**

The Compact Premium+ PDU unleashes the maximum potential of RackLink<sup>™</sup> —allowing remote management of your AV systems and providing bestin-class network security protection; Compact form factor ideal for mounting on Lever Lock<sup>™</sup> and within Chief Impact Kiosks

# vaddio



#### 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 overnetwork A/V connectivity in large venue applications.







#### Parallax<sup>®</sup> 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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