

1x 1GbE RJ45, 1x 12G-SDI, 1x HDMI 2.0

AWS Elemental Link UHD is an encoding device that connects a live video source, like a camera or video production equipment, to AWS. Link UHD offers a configuration-free, cost-efficient way to securely and reliably transfer video to AWS Elemental MediaLive or AWS Elemental MediaConnect. To use the device, you simply connect it to power, Ethernet, and a video source. Then you control and monitor your Link UHD device from anywhere you have access to the AWS Management Console. Link UHD improves the quality and reliability of your live video streams while reducing the cost and complexity of equipment that you need to operate on-premises.



BENEFITS

Fast and easy setup

Link UHD devices are shipped fully configured for your AWS Account. Simply connect the device to power, network, and an SDI or HDMI video source. Once connected, your video is available as a source for MediaLive in the AWS Management Console or can be configured to use a MediaConnect flow for transport, processing, and sharing.

Small and portable

Link UHD is a small, portable device with minimal power and cooling requirements. Weighing less than 2 lb (735g), Link can travel wherever you need to connect live video to the cloud. Link is silent, and fanless operation and minimal heat generation make the device practical to use in low-noise environments like studios.

Manage and monitor devices remotely

With AWS Elemental Link UHD, you control the entire live event workflow using the AWS Management Console. Because you can manage and monitor multiple devices anywhere in the world from a central point of control, you don't need to send technical operators to event sites in order to set up and configure your video.

High video quality

Link UHD is designed to maximize the quality of video sent to the cloud and account for the unpredictable nature of network conditions. The device uses an advanced video compression system that continuously adjusts to available bandwidth in order to deliver the best possible video under all network conditions.

Cost efficient

At a price of \$4,995 USD per device (excluding customs clearance, duty, tax, and shipping), Link UHD provides a broadcast-grade way to connect your on-premises live video source to AWS at a fraction of the cost of traditional approaches. Because setup is easy and management of devices is handled remotely, Link is efficient to own and operate.

Delight viewers with HDR video

Delight your audience with brilliant picture quality using Link UHD, which supports up to 10 bit color depth for your video. Using Link UHD you can create high dynamic range (HDR) channels with HLG and HDR 10.

AWS Elemental Link-UHD

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PHYSICAL

Dimensions (W x H x D)	14.50 cm x 15.70 cm 5.71 in x 1.69 in x 6.18 in
Weight	0.8 kg (Unit) 1.7 kg (Gross)
ECCN	EAR99
USHTS Code	8525.50.3040

ELECTRICAL

Max Potential Power	25 Watts (Max)
Heat Dissipation	85.30 BTU/hr (Max)
Line Frequency	50—60 Hz
Input Voltage	100-240 VAC

ENVIRONMENTAL

Operating Conditions	0 to 40° C (32 to 104° F) 5% to 80% RH (non-condensing)
Storage Conditions	-20 to 75° C (-4 to 167° F) Up to 95% RH (non-condensing)
Noise Level	0 dBA (Max)
Electromagnetic Compliance	EN 55032:2012/AC:2013 Class B EN 61000-3-2:2014, EN 61000-3-3:2013 FCC 15.107:2020 Class B FCC 15.109:2020 Class B ICES-003:2016 Class B VCCI-CISPR 32:2016 Class B
Safety Compliance	IEC 62368-1:2014

SYSTEM

System Management	AWS Elemental MediaLive Console
Interfaces	1x 1GbE RJ45 1x 12G-SDI 1x HDMI 2.0 1x USB 3.0 Momentary Switch Button LCD Front Panel Display

INPUT SUPPORT

Transport Formats	<ul style="list-style-type: none">– Video is transported to MediaLive or MediaConnect with up to 10-bit color depth with 4:2:2 color space sampling– Interlaced video is deinterlaced and transported as progressive video
12G-SDI Interface	<ul style="list-style-type: none">– 4096x 2160p @ 23.97fps, 24 fps, 25 fps, 29.97 fps, 30fps, 50fps, 59.94 fps, 60 fps– 1920x1080p @ 23.97fps, 24 fps, 25 fps, 29.97 fps, 30fps, 50fps, 59.94 fp– 1280x720p @ 50fps, 59.94fps, 60fps– 1920x1080i 25fps, 29.97fps, 30fps (field rate is 50, 59.94, 60 respectively)– 576i 25fps (field rate is 50)– 480i 29.97fps, 30fps (field rate is 59.94 and 60 respectively)
HDMI 2.0 Interface	<ul style="list-style-type: none">– 4096x2160p @ 23.97fps, 24fps, 25fps, 29.97fps, 30fps, 50fps, 59.94fps, 60fps– 1920x1080p @ 23.97 fps, 24fps, 25fps, 29.97fps, 30fps, 50fps, 59.95fps, 60fps– 1280x 720p @ 50fps, 59.94fps, 60fps– 1920x1080i 25fps, 29.97fps, 30fps (field rate is 50, 59.94, 60 respectively)– 576i 25fps (field rate is 50)– 480i 29.97fps, 30fps (field rate is 59.94 and 60 respectively)
Metadata	<ul style="list-style-type: none">– Timecode (SMPTE 12M), closed captioning (SMPTE 334), teletext (OP-47), and ad insertion (SCTE-104)
Audio Support	<ul style="list-style-type: none">– 16 embedded audio channels over 12G-SDI– 8 embedded audio channels over HDMI 2.0– 32 kHz, 44.1 kHz, and 48 kHz supported– Dolby Digital and Dolby Digital Plus pass through supported
Codec and Transport	<ul style="list-style-type: none">– Efficient, advanced video compression: choice of HEVC (H.265) or AVC (H.264)– All streaming media is encrypted and transported using an ARQ protocol– Support bitrates: 0.5Mbps to 50Mbps– Bitrate limit can be set in AWS Management Console– Channel tune algorithm adjusts bitrate based on available bandwidth

HARDWARE CONFIGURATION

Network Requirements

- Port 443: Open for inbound connections to Internet
- Port 2088: Open for inbound connections to Internet
- No inbound connections (“Port Forwarding”) required

IP Provisioning

- DHCP supported (Default Configuration)
- Static IP Provisioning supported through on-device UI and button press as per instructions below

SETTINGS BUTTON FUNCTIONALITY

Press and hold for . . .	When LEDs blink. . .	Release to set as. . .
5 seconds	Once	DHCP
10 seconds	Twice	Static IP
15 seconds	Thrice	Revert to default password

LED FUNCTIONALITY

LED	LED State	Definition
Power	OFF	The device is not powered ON
Power	Solid Blue	The device is powered ON
Online	Flashing Red	The network did not provide an IP Gateway
Online	Solid Red	The device can't connect to public internet
Online	Solid Blue	The device has successfully connected to public internet
Online	Flashing Purple	Connected to public internet but port 123 is closed and limiting functionality
AWS Link	Solid Red	Device is not able to link with AWS
AWS Link	Solid Blue	Device has successfully linked to AWS
Streaming	Solid Red	Video source has not locked
Streaming	Flashing Purple	No valid video input and the service is live streaming
Streaming	Solid Purple	Valid video input but not streaming
Streaming	Solid Blue	Video input is valid and the service is live streaming