



Introduction

The Atlona **AT-OME-SW21-TX-WPC** is a 2×1 switcher and HDBaseT transmitter with HDMI and USB-C inputs. It sends video up to 4K/60 4:2:0, plus embedded audio, control, and USB over distances up to 330 feet (100 meters). The OME-SW21-TX-WPC features a US one-gang, wallplate form factor, and includes interchangeable black and white wallplates and faceplates. Part of the Omega™ Series of integration products for modern AV communications and collaboration, the OME-SW21-TX-WPC is HDCP 2.2 compliant. The USB-C input is ideal for AV interfacing with newer Mac®, Chromebook™, and Windows® PCs, as well as smartphones and tablets. With a matching HDBaseT receiver, the integrated USB extension addresses the challenge of connecting between USB devices at remote locations, and is ideal for software video conferencing and touch or interactive displays. The OME-SW21-TX-WPC includes USB 2.0 and USB-C PC host interfaces, plus a USB 2.0 interface for a peripheral device such as a speakerphone, microphone, or keyboard and mouse. This transmitter is ideal for use with Omega Series receivers as well as switchers with HDBaseT inputs.

Applications

- **Complete system integration**
The OME-SW21-TX-WPC and OME-SR21 or OME-EX-RX together provide a compact, yet comprehensive and cost-effective integration solution.
- **Remote AV source connections**
This transmitter is ideal for extending AV connectivity from an OME-PS62 in a central equipment rack to lecterns as well as remote wall and floor box locations, where presenters can easily access the system.
- **Video conferencing**
The OME-SW21-TX-WPC and a compatible Omega Series receiver or switcher are ideal for soft codec and web-based conferencing applications, with the ability to integrate with PCs, cameras, speakerphones, and microphones.

Key Features

US one-gang enclosure for wallplate openings – interchangeable black or white trim kits

- Allows inconspicuous installation on a wall, in furniture, or in a floor box. Includes black and white wallplates and faceplates.
- Meets end user requirements for conveniently accessible yet discreet AV connectivity.

2×1 HDBaseT switcher with HDMI and USB-C inputs

- Immediate compatibility with laptops and tablets with USB-C ports supporting AV.
- No need to provide USB-C to HDMI adapters⁽¹⁾.

Video, audio, power, and data over category cable utilizing HDBaseT technology

- Transmits 4K/UHD video up to 330 feet (100 meters) with CAT6/6a/7 cable, or up to 295 feet (90 meters) using CAT5e cable.
- Uses easy-to-integrate category cable for low-cost, reliable system installation.

USB 2.0 interfacing and extension up to 330 feet (100 meters)

- USB-C and USB type B interfaces for connection to host PCs, plus a USB type A port for a peripheral device such as a microphone, speakerphone, or a keyboard and mouse.
- Provides an ideal USB integration solution for software video conferencing and other applications⁽²⁾.

4K/UHD capability @ 60 Hz with 4:2:0 chroma subsampling

- Compatible with sources up to 4K/60 4:2:0 and 4K/30 4:4:4.
- Supports video data rates up to 10 Gbps from PCs, media players, and Ultra HD Blu-ray players.

Remote powering over HDBaseT

- Industry standard IEEE 802.3af PoE is supplied by an Atлона receiver or switcher over HDBaseT.
- Allows convenient wall, floor box, or furniture installation without the need for local AC power.

Automatic display control

- Automatically changes display power state based on active or standby mode of the switcher. Control signals to display are transmitted via IP, RS-232, IR, or CEC. Embedded, comprehensive selection of display drivers from the Velocity™ System driver database.
- Enables effortless, automated system operation without the need for an external control system.

Automatic input selection using hot plug detect and video detection technology

- Selects active input when sources are connected or if there is a change in source power status.
- Enables simplified, automatic system operation without user intervention.

Specifications

Video		
Signal Type	Input - DisplayPort Alternate Mode (USB-C), HDMI	
	Output - HDBaseT	
Copy Protection	HDCP 1.4/2.2	
Pixel Clock	300MHz	
UHD/HD/SD	4096x2160(DCI)@60/50/30 ⁽³⁾ /25/24 Hz 3840x2160(UHD)@60/50/30 ⁽³⁾ /25/24 Hz 2560x1440@30 Hz 1920x1080p@60/59.94/50/30/29.97/25/24/23.98 Hz	1920x1080i@30/29.97/25 Hz 1280x720p@60/59.94/50/30 Hz 720x576i/p@50 Hz 720x480i/p@60 Hz
VESA All resolutions are 60Hz	2560x1600 1920x1200 1680x1050 1600x1200 1440x900 1400x1050 1280x1024	1280x800 1366x768 1360x768 1152x864 1024x768 800x600 640x480
Color Space	YUV, RGB	
Chroma Subsampling	4:4:4, 4:2:0 ⁽³⁾	
Color Depth	8-bit, 10-bit, 12-bit	

Audio			
Pass-through	PCM 2.0 LPCM 5.1 LPCM 7.1	Dolby® Digital Dolby Digital Plus™ Dolby TrueHD Dolby Atmos®	DTS® Digital Surround™ DTS-HD Master Audio™ DTS:X®
Bit Rate	24 Mbits/s max		
Sample Rate	32 kHz, 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz		

USB	
Signal	2.0
Maximum Data Rate	120 Mbps

Connectors	
USB-C	1 - USB Type-C v3.1, 24-pin female
HDMI	1 - Type A, 19-pin female
HDBaseT OUT	1 - RJ45
HOST	1 - USB Type-B, female
DEVICE	1 - USB Type-A, female

Indicators and Controls	
PWR indicator	1 - LED, green
LINK indicator	1 - LED, yellow

Resolution / Distance	4K/UHD - Feet / Meters		1080p - Feet / Meters	
USB-C	6	2	6	2
CAT5e	295	90	330	100
CAT6/6a/7	330	100	330	100

Power	
Consumption	12.5 W
Supply	PoE via connected receiver

Temperature	Fahrenheit	Celsius
Operating	+32 to +104	0 to +40
Storage	-4 to +140	-20 to +60
Humidity (RH)	20% to 90%, non-condensing	

Dimensions (H x W x D)	Inches	Millimeters
Unit	4.06 x 1.78 x 2.64	103 x 45 x 67

Weight	Pounds	Kilograms
Device	0.74	0.34

Certification	
Device	CE, FCC

Accessories

SKU	Description
AT-LC-H2H-1M	LinkConnect HDMI to HDMI 1 Meter Cable
AT-LC-H2H-2M	LinkConnect HDMI to HDMI 2 Meter Cable
AT-LC-H2H-3M	LinkConnect HDMI to HDMI 3 Meter Cable
AT-LC-UC2UC-2M	LinkConnect USB-C to USB-C 2 Meter Cable

Footnotes

- (1) USB-C port does not support device powering.
- (2) Maximum 120 Mbps data rate supported over HDBaseT.
- (3) HDMI input supports up to 4K/UHD @ 60 Hz YUV 4:4:4 8-bit. HDBaseT output supports 4K/UHD @ 60 Hz YUV 4:2:0 only. USB-C limited to 4096x2160 @ 30 Hz & 3840x2160 @ 30 Hz 4:4:4 8-bit only.

Copyright, Trademark, and Registration

© 2021 Atlona Inc. All rights reserved. "Atlona" and the Atlona logo are registered trademarks of Atlona Inc. Pricing, specifications and availability subject to change without notice. Actual products, product images, and online product images may vary from images shown here.



The terms HDMI, HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI licensing Administrator, Inc.



Dolby, Dolby Atmos, and the double-D symbol are registered trademarks of Dolby Laboratories Licensing Corporation.



For DTS patents, see <http://patents.dts.com>. Manufactured under license from DTS, Inc. DTS, the Symbol, DTS and the Symbol together, and Digital Surround are registered trademarks and/or trademarks of DTS, Inc. in the United States and/or other countries. © DTS, Inc. All Rights Reserved.

All other trademark(s), copyright(s), and registered technologies mentioned in this document are the properties of their respective owner(s).