LWR LIGHTWARE

USB Type-C and HDMI Switcher Transmitter

Universal switcher transmitter is part of a transmitter-receiver configuration that provides the same functionality as the UCX product range.

Details

Lightware's universal switcher transmitter is part of a transmitter-receiver configuration that provides the same functionality as the UCX product range in terms of signal management and connectivity. (Such functionality includes video resolution up 4K@60Hz 4:4:4 through the USB-C and HDMI inputs, easy USB host switching, and advanced security features). At the same time, the bundle overcomes the limitations imposed by the USB and HDMI cables and allows for the extension of video, audio, and control signals in one direction and the USB 2.0 data in the other up to a transmission distance of 100m.

Moreover, the transmitter can provide remote power to the connected receiver up to the power limit of 25.4W of the PoE+ specification.

- CEC at the HDMI outputs
- Audio de-embedding
- Supports uncompressed HDMI 4K signal formats (4K UHD @60Hz RGB 4:4:4, up to 18 Gbps, 600 MHz pixel clock)
- Supports Lightware Advanced Room Automation (LARA)

Features

- Single CAT connectivity between TX and RX devices, up to 100m, with Power delivery from TX to RX, Video, USB2.0, Ethernet, OCS and Serial
- USB-C input connectivity on the TX device for 4K Video, Audio, Data, and Power (Video, Audio, Data and Power over a single USB-C connection)
- USB-C charging up to 100W on the TX
- Multiple USB 2.0 connectivity for any type of USB device (Camera, speakerphone, touch monitor, USB-HID devices etc.) Both on the TX and the RX
- Independent USB Host switching layer for multiple USB hosts, up to 8 devices (4x at the TX side, 4x at the RX side)
- Room device control via Ethernet (TCP/IP) or Serial (2x at TX device, 1x at RX device)
- Multiple Ethernet network configurations fitting various corporate network topologies and IT security standards (e.g. 802.1x compliance)
- SSH, SSL, and HTTPS for IT security
- Occupancy sensor (OCS) connection at the RX device (with 24V power supply), GPIO control ports at TX device
- Welcome Screen for custom corporate logo and on-screen display warning messages

Specifications

General	Compliance	CE; UKCA
	Electrical safety	IEC 61000-3-3:2013+AMD1:2017
	EMC (emission)	IEC/EN 55032:2015
	EMC (immunity)	IEC/EN 55035:2017
	RoHS	EN 63000:2018
	Warranty	3 years
	Operating temperature	0° to +50°C (+32° to +122°F)
	Operating humidity	10% to 90%, non-condensing
	Cooling	Cooling fan
Power	Power supply	External 160W Power Supply (if remote powering UCX-TPX-RX)
	Supported power source	100-240 V AC; 50/60 Hz
	AC power plug	Interchangeable (EU, UK, JP/US, AUS/NZ)
	Battery cell type	BR1632A
Enclosure	Enclosure material	1 mm steel
	Dimensions in mm	271 W x 140,3 D x 26 H
	Dimensions in inch	10.7 W x 5.57 D x 1.01 H
	Weight	900 g
Video Inputs	**USB-C input**	
	Connector type	24-pole USB type C receptacle
	A/V standard	DP 1.2a
	HDCP compliance	HDCP 1.4, HDCP 2.2
	Color space	RGB, YCbCr
	Video delay	O frame
	Max. video resolution	4096x2160@60Hz RGB 4:4:4 (up to 600MHz pixel clock); 1920x1080@120 Hz, 36 bit
	Audio formats	all formats in line with HDMI 2.0 standard
	3D support	yes

Specifications

Video Inputs	HDMI input	Connector type	19-pole HDMI Type A receptacle (with screw locking option)
		A/V standard	DVI 1.0, HDMI 1.4, HDMI 2.0
		Maximum data rate	18Gbps
		Maximum pixel clock	597MHz
		HDCP compliance	HDCP 1.4, HDCP 2.2
		Color space	RGB, YCbCr
		Video delay	0 frame
		Max. video resolution	4096x2160@60Hz RGB 4:4:4 (up to 600MHz pixel clock); 1920x1080@120 Hz, 36 bit
		Max. input HDMI cable length (with premium certified cable) at 3840x2160@60Hz 4:4:4	5m
		Re-clocking	Pixel Accurate Re-clocking
		3D support	yes
		Audio mode	Simultaneous pass-through and de-embedding to the Audio layer
		Supported audio formats for pass-through	All HDMI2.0 audio formats
		Supported audio formats for de-embedding	Uncompressed
		Compressed	Dolby Digital, DTS; Compressed HBR; Dolby TrueHD, DTS-HD
Video Outputs	TPX output	Connector type	RJ45 connector
		Power over Ethernet	POE PD (IEEE802.3af)
		Data rate	10GBase-T
		Compliance	AVXT
		HDCP compliance	HDCP 2.3
		Transferred signals	Video, Audio, USB 2.0, RS-232, OCS, Ethernet
		Color space	RGB, YCbCr
		Supported resolutions at 8 bits/color	up to 4096x2160@60Hz (4:4:4)
		Audio formats	8-channel PCM, Dolby TrueHD, DTS-HD Master Audio 7.1

Specifications

Audio Ports	Analog audio output	Connector type	5-pole Phoenix connector
		Audio formats	2-ch PCM
		Sampling frequency	48 kHz
		Volume	-95.62 dB-0 dB
		Balance	-100 +100 (0 = center)
	GPIO port	Connector type	8-pole Phoenix
		Function (pin 1-6)	Configurable (input/output)
		Function (pin 7)	5V output
		Function (pin 8)	Ground
Control ports	Ethernet port	Connector type	RJ45 female connector
		Ethernet data rate	10/100/1000 Base-T, full duplex with auto detect
		Power over Ethernet (PoE)	Not supported
	USB port	Connector type	A-type receptacle
		USB compliance	USB 2.0
		Connector type	mini B-type
		USB compliance	USB 2.0
	RS-232 port	Connector type	3-pole Phoenix connector
		Baud rates	between 9600 and 115200 baud
		Data bits	8
		Parity	None Odd/Even
		Stop bits	1/2
		Output voltage: Low level	3-15V
		Output voltage: High level	-15V - 3V
USB ports	Host port (UFP)	Connector type	C-type receptacle
		USB compliance	USB 2.0
		Connector type	B-type receptacle
		USB compliance	USB 2.0
	Device port (DFP)	Connector type	A-type receptacle
		USB compliance	USB 2.0