



Benefits

- ▶ Extend uncompressed video & audio up to 18Gbps
- ▶ Extend HDMI signal point-to-point up to 100 m
- ▶ Supports video resolutions up to 3840 x 2160@60Hz
- ▶ Gigabit Ethernet Transmission via CAT. 5e / 6 / 6A cable
- ▶ 4 x USB 2.0 hub port for peripheral devices

Applications

- Surveillance System
- Broadcasting
- Transportation
- Conference System
- Video Edit System
- Digital Signage
- Factory Automation
- Server Room

Product Specifications

Technical	Transmitter / Receiver
Input/Output Video Signal	HDMI with 4K@60 YUV 4:4:4, HDCP 2.2
Maximum Resolution	16 : 9 - max. 3840 x 2160@60Hz 16 : 10 - max. 1920 x 1200@60Hz 4 : 3 - max. 1600 x 1200@60Hz
Audio Format	Audio De-embedding: Stereo HDMI In/Out: PCM 2.0/5.1/7.1, Dolby TrueHD, Dolby Atmos, DTS-HD Master Audio and DTS:X Audio In/Out (pass-through): Stereo
Maximum Pixel Clock	600MHz
Maximum Data Rate	HDMI : 18Gbps USB : 350Mbps
USB Specification	USB 2.0
Transmission Distance	Cat 6A : 100m (4K / 1080P) Cat 5e / 6 : 40m ~ 70m (4K / 1080P)

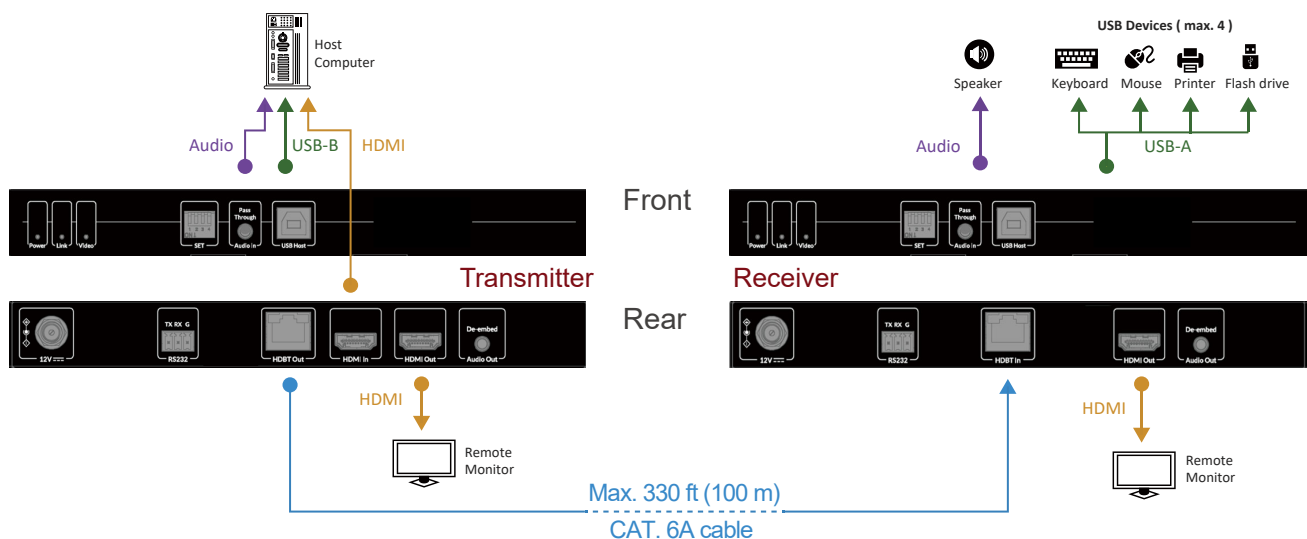
Power	Transmitter / Receiver
Input	12V / 3A (each unit)
Consumption (Max.)	22W (each unit)

Physical	Transmitter	Receiver
Product (W x D x H)	215 × 25 × 120 mm (each unit) 8.5 x 1.0 x 4.7 inches (each unit)	
Packing (W x D x H)	395 x 225 x 80 mm 15.5 x 8.9 x 3.2 inch	
Net weight	0.55 kg 1.21 lbs	0.56 kg 1.23 lbs
Gross weight	1.254 kg 2.765 lb	
Chassis color	Black	
Chassis materials	Steel	

Environment	
Operating temp.	0°C to 45°C (32°F to 113°F)
Storage temp.	-20°C to 70°C (-4°F to 158°F)
Relative humidity	20% to 90%, non-condensing

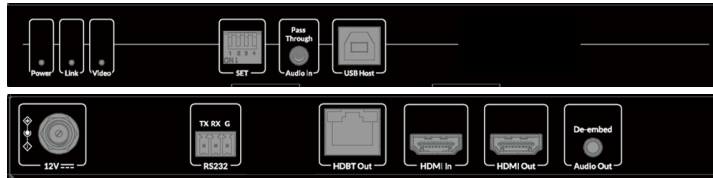
Compliance	
Safety	FCC / CE
Environment	RoHS3 / REACH

Connection Diagram



Design Overview

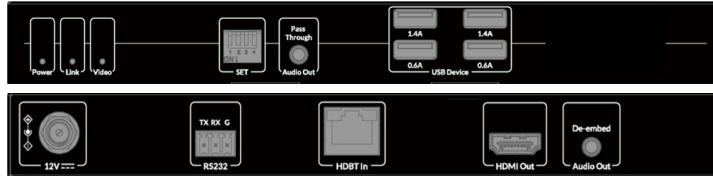
Transmitter



Front

Rear

Receiver



Front

Rear

	Port	Function
Transmitter	SET Switch	A 4-pin DIP switch used to configure the RS232 working modes (Pass-through, Valens firmware upgrade, or MCU firmware upgrade).
	Audio IN	VGA signal input to connect to the VGA host computer/ device.
	USB Host	A USB 2.0 Type-B port used to connect to a host computer or PC.
	DC 12V	Connects to the provided power adapter. Due to one-way PoH support, the power supply only needs to be connected to the receiver to power both units.
	RS232	Link an RS232 device for bidirectional pass-through or system firmware updates.
	HDBT OUT	Connects directly to the HDBT In port of the receiver unit.
	HDMI IN	Connects to your primary HDMI source device.
	HDMI OUT	Connects to a local HDMI display for signal loop-out.
	Audio OUT	Extracts audio output to connect directly to an external speaker.
Receiver	SET Switch	4-pin DIP switch to manage the receiver's RS232 operation mode.
	Audio OUT	Connects to an audio receiver to output the pass-through audio coming from the transmitter.
	USB-hub	USB 2.0 Type-A ports used to connect peripherals such as keyboards, mice, USB cameras, or flash drives. ** The top two USB ports support a maximum current of 1.4A, while the bottom 2 ports support up to 0.6A. Verify USB 2.0 backward compatibility before plugging in a USB 3.0 device.
	DC 12V	Connects to the main power adapter to supply power to both the receiver and transmitter units via PoH.
	RS232	Connects to an RS232 device for pass-through communication or firmware maintenance.
	HDBT IN	Connects to the HDBT Out port of the transmitter.
	HDMI OUT	Connects directly to your remote display or monitor.
	Audio OUT	Extracts local audio output to connect to an audio receiver or external speaker.

LED Indicators

	Indicator	Description
Transmitter / Receiver	Power LED	Turns on when the device is powered on; turns off when powered off.
	Link LED	Status light is on when the HDBaseT link is normal, and off if there is a link error or no connection.
	Video LED	Illuminates when the HDMI input signal is active, and turns off when the input signal is missing or inactive.