NEXIS

USB 3.0 Extender (100m)

HUE3100B



1. Introduction

The USB 3.0 Extender can extend USB signal to a distance up to 100m/328ft via a single CAT6a cable. Transmitter features with one USB 3.0 Type B input, one FSYSNC GPIO input and one RS-232 pass-through. Receiver features with four USB 3.0 Type A outputs, one FSYSNC GPIO output and one RS-232 pass-through. Bi-directional 24V PoC is also supported.

The product can be widely used for long distance signal transmission between a PC and USB devices.

2. Features

- ☆ Extension of USB 3.0 is up to 100m/328ft over CAT6a cable
- ☆ USB 3.0 connectivity with data transfer rate up to 5Gbps
- ☆ Backwards compatible with USB 2.0 and 1.1
- ☆ Hardware acceleration for isochronous and bulk transfer
- ☆ USB-A port 1 and 2 support 5V/1.5A, port 3 and 4 support 5V/1A on the Receiver
- ☆ Support RS-232 pass-through and FSYNC GPIO pass-through (for industry camera use)
- ☆ Support bi-directional 24V PoC
- ☆ Simple plug and play, no driver and setting installation required

3. Package Contents

① 1× USB 3.0 Extender (Transmitter)
② 1× USB 3.0 Extender (Receiver)
③ 1× 24V/2A Locking Power Supply
④ 2× 4-pin 3.5mm Phoenix Connector (Male)
⑤ 4× Mounting Ear
⑥ 8× Machine Screw (KM3*4)
⑦ 1× User Manual

4. Specifications

Technical	
USB Protocol	USB 3.0
Transmission Rate	Up to 5Gbps
Transmission Distance	100m/328ft over CAT6a (F/FTP) cable
ESD Protection	IEC 61000-4-2: ±8kV (Air-gap discharge), ±4kV (Contact discharge)
Connections	
Transmitter	Input: 1× USB HOST [USB-B, 9pin Female] Output: 1× HDBT OUT [RJ45, Female] Control: 1× RS-232 [3pin-3.5mm Phoenix Connector] 1× FSYNC [1pin-3.5mm Phoenix Connector] 1× SERVICE [USB-C, Update Port]
Receiver	Input: 1× HDBT IN [RJ45, Female] Output: 4× USB Devices [USB-A, 9pin Female] Control: 1× RS-232 [3pin-3.5mm Phoenix Connector] 1× FSYNC [1pin-3.5mm Phoenix Connector] 1× SERVICE [USB-C, Update Port]
Mechanical	
Housing	Metal Enclosure
Color	Black
Dimensions	Transmitter / Receiver: 85mm [W] × 100mm [D] × 25.5mm [H]
Weight	Transmitter: 253g, Receiver: 260g
Power Supply	Input: AC 100~240V 50/60Hz Output: DC 24V/2A
Power Consumption	PoC Power Supply: 40W (Max)
Operating Temperature	0°C ~ 40°C / 32°F ~ 104°F
Storage Temperature	-20°C ~ 60°C / -4°F ~ 140°F
Operating Humidity	20%~80% relative humidity, non-condensing
Storage Humidity	10%~90% relative humidity, non-condensing

5. Application Example

