PIXELHUE

HDMI-HBT

Extender

Specifications

Change History

Version	Date	Changes
V1.0.1	2024-03-19	• Updated the product features. • Updated the document style.
V1.0.0	2020-07-22	First release

Introduction

The HDMI-HBT video extender utilizes HDBaseT technology for long-distance transmission of HDMI signals.

The HDMI-HBT-T features 1x HDMI input and 1x HDBaseT output, while the HDMI-HBT-R features 1x HDBaseT input and 1x HDMI output. The HDBaseT connector supports a 100-meter transmission distance using a single CAT 6 Ethernet cable. This resolves issues related to poor transmission and image interference over long Ethernet cables, enhancing HDMI signal transmission distance and image quality.

Features

- Supports HDMI 1.4 input with backward compatibility.
- Converts HDMI signal to HDBaseT signal for transmission, extending transmission distance and ensuring image quality.
- Supports up to 4:4:4 10-bit input.
- HDBaseT output uses standard Ethernet cable for convenient on-site installation and reduced transmission costs.
- Includes HDMI, LINK and PWR indicators for easy monitoring of device status.

- Supports plug and play functionality for both input and output, requiring no drivers.
- Allows connection of 7-pair device units to extend the transmission distance.
- Supports EDID transparent transmission function for compatibility with various display devices.
- Supports audio transmission.
- Complies with various certifications, such as RoHS.

Appearance

HDMI-HBT-T

Input Connector	Quantity	Description
HDMI IN	1	HDMI 1.4 input connector Supports input resolutions up to 3840×1080@60Hz.

Indicator	Description
HDMI	• On: The HDCP-encrypted input source is accessed. • Off: The input source is not accessed. • Flashing: The input source is accessed but not used.
LINK	• On: Data is being transmitted. • Off: HDBaseT connector is not connected. • Flashing: HDMI connector is not connected.
PWR	• On: Power supply is connected. • Off: Power supply is not connected.

Output Connector	Quantity	Description
HDBaseT OUT	1	HDBaseT output connector is used for data transmission.

HDMI-HBT-R

Connector	Quantity	Description
HDMI OUT	1	HDMI 1.4 output connector Supports output resolutions up to 3840×1080@60Hz.

Indicator	Description
HDMI	• On: The HDCP-encrypted input source is accessed. • Off: The input source is not accessed. • Flashing: The input source is accessed but not used.
LINK	• On: Data is being transmitted. • Off: HDBaseT connector is not connected. • Flashing: HDMI connector is not connected.
PWR	• On: Power supply is connected. • Off: Power supply is not connected.

Connector	Quantity	Description
HDBaseT IN	1	HDBaseT input connector

Specifications

Connector	Description
HDMI	HDMI 1.4 connector supports HDCP 1.4.
HDBaseT	HDBaseT connector supports HDBaseT transmission protocol.

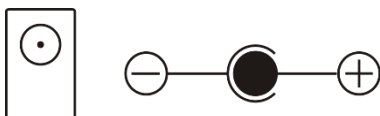| Ethernet Cable	Description
Ethernet cable	CAT 5e, CAT 6, CAT 6a, CAT 7

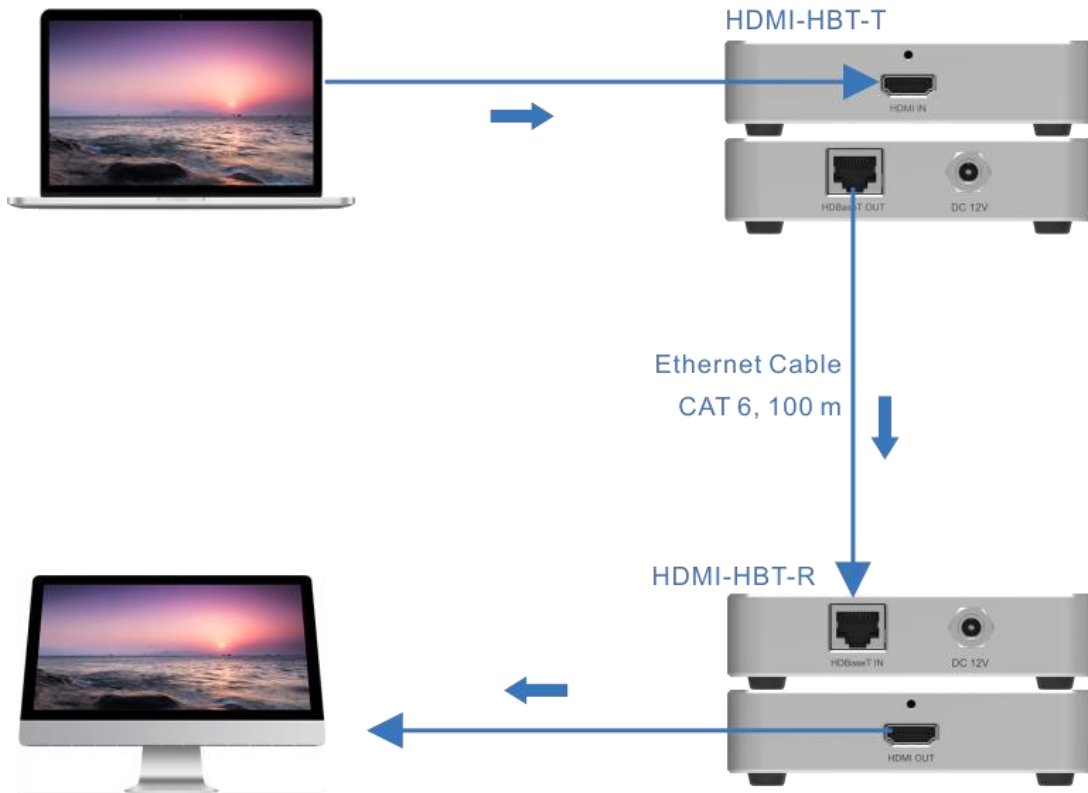| Transmission distance	CAT 5e/CAT 6	100 m	1080p@60Hz
		70 m	3840×1080@60Hz
	CAT 6a/CAT 7	100 m	• 1080p@60Hz • 3840×1080@60Hz
Overall Specifications	**Description**		
Power supply	DC 12 V		
Power consumption	• HDMI-HBT-T: 4 W • HDMI-HBT-R: 6 W		
Operating temperature	0°C to +50°C		
Storage temperature	−10°C to +60°C		
Operating humidity	10% RH to 90% RH, noncondensing		
Dimensions	110.0 mm × 79.8 mm × 28.9 mm		
Package dimensions	322 mm × 234 mm × 85 mm		
Material	Metal		
Net weight	• HDMI-HBT-T: 167.4 g • HDMI-HBT-R: 171.2 g		

Note:

The transmission distance data is tested by the Pixelhue Technology Ltd lab. The test data may differ due to the influence of environment and cable material, and the actual working environment shall prevail. The specifications of Ethernet cable and video cable used by the lab test are as follows.
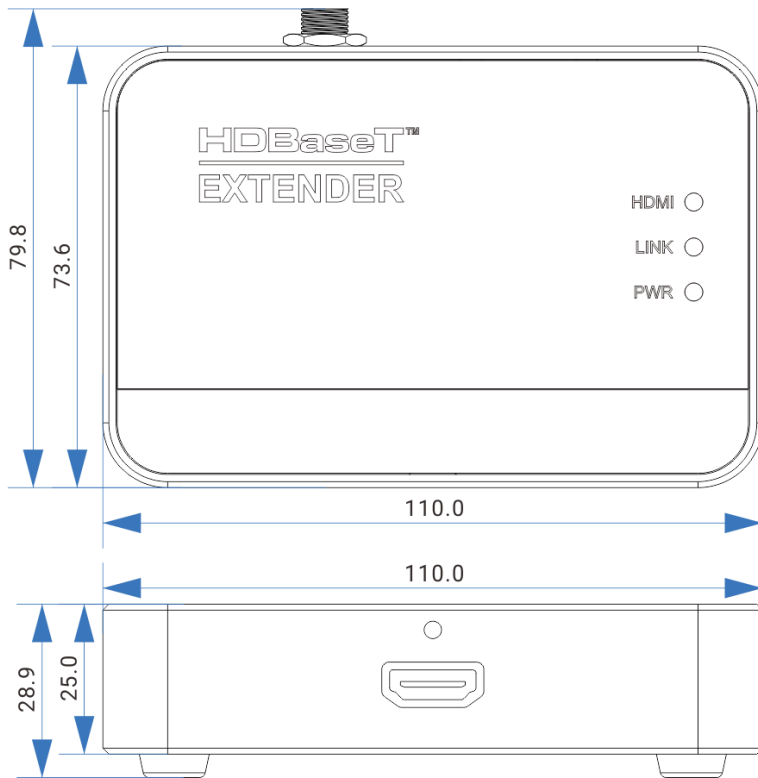
Video cable: 28AWG core

The positive and negative terminals of the power supply are as follows.

Applications

HDMI-HBT-T

HDMI IN

HDBaseT OUT   DC 12V

Ethernet Cable
CAT 6, 100 m

HDMI-HBT-R

HDBaseT IN   DC 12V

HDMI OUT

Dimensions

HDBaseT™
EXTENDER

HDMI ◯
LINK ◯
PWR ◯

79.8

73.6

110.0

110.0

28.9

25.0

Tolerance: ±0.3   Unit: mm

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