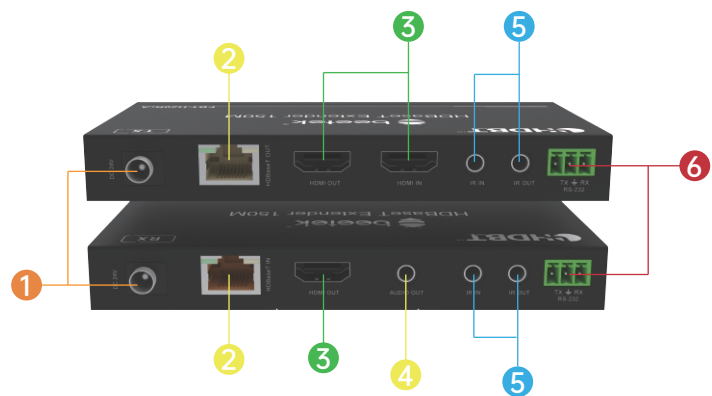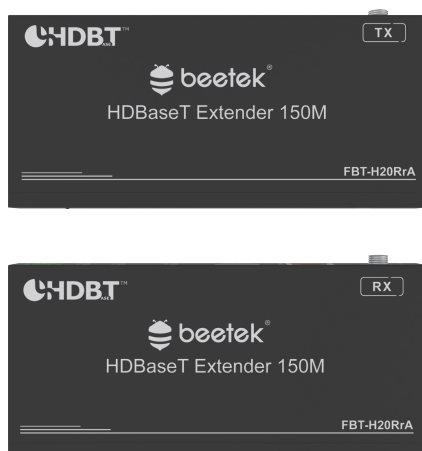# TP–H20RrA–TR

HDMI 2.0 HDBeasT Extender

Product number:5.01

Summary

TP-H20RrA-TR is an HDMI 2.0 HDBaseT extender that can transmit an HDMI 2.0 signal up to 120 meters at maximum resolution of 3840x2160@60Hz. It has a local HDMI output, two-way infrared, RS-232, audio de-embedding, and the receiver can be powered from the transmitter via PEO. The full-featured HDMI interface also supports HDCP, ARC, CEC, HLG and 3D, plug and play, making it suitable for fixed installation, residential and other applications.

| HDMI 1.4 | Zero frame delay | uncompressed | HDCP 2.2 | 3D threedimensional | IR Infrared Radiation |

Product view

Nunmber	Name	Nunmber	Name
❶	DC 24V	❺	IR
❷	RJ45	❻	RS232
❸	HDMI Type A Female		
❹	3.5mm Audio		

Technical Characteristics

✦ HDMI 2.0+RS232+IR CAT extender using HDBaseT technology.

✦ Uses standard CAT6 cable for point-to-point extension.

✦ Supports 3840 ×2160@60Hz transmission up to 120 meters and 1920 ×1080@60Hz

   transmission up to 150 meters.

✦ Transmitter has a local HDMI output for preview or other applications.

✦ Two-way RS-232 infrared interfaces for supporting transmission of control signals.

✦ Supports PoE remote power, so only one end requires a power supply.

✦ Full-featured HDMI 2.0 supports EDID transmission, CEC, HDR10+, ARC, HLG and 3D.

✦ Supports up to 7.1 channels of common HDMI embedded audio formats, PCM, Dolby,

   DTS-HD, etc.

✦ Receiver can de-embed the audio from HDMI to a stereo output.

✦ All ports have full ESD protection.

Connection diagram

TP-H20RrA-TX

TP-H20RrA-RX

Power

IR IN   IR OUT

IR IN   IR OUT

Audio

Signal Source

Monitor

The farthest distance is 150 meters

Display side

Audio
IR
HDMI cable
Network cable
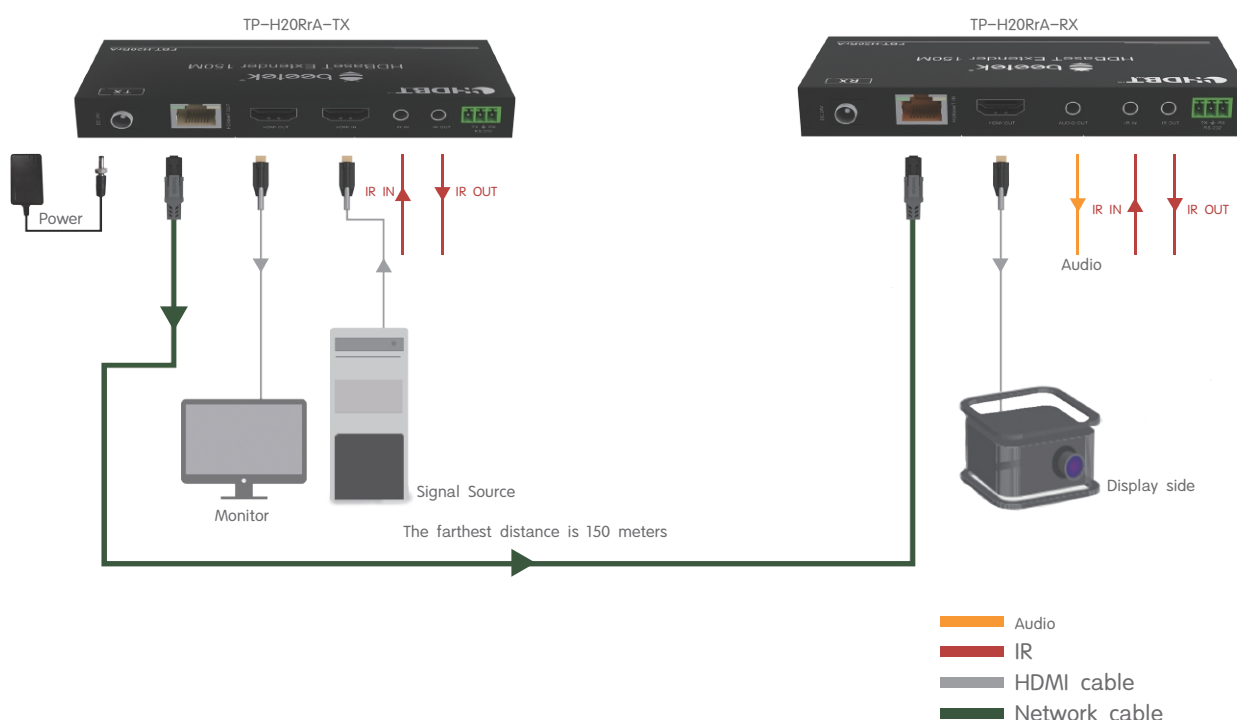
Product parameter

Name	Parameter
Signal	HDMI 2.0
Input Connector	TX : HDMI Type A Female, RS232, IR RX: RJ45, RS232, IR
Output Connector	TX : RJ45, HDMI Type A Female, RS232, IR RX: HDMI Type A Female, RS232, IR, 3.5mm Audio
HDMI Loop-out	Yes
CAT Cable Type	CAT6 and above
Indicator LED	Power, Signal
Locking power connector	Yes
Power Consumption	DC 24V 2A
Working Temp	−20°C ~ 70°C
Material	Metal mold
EDID	Pass-through
DDC	Yes
IR	Supports bidirectional IR
RS232	Supports bidirectional RS232
HHDMI Audio	Yes
HDMI Audio De-embedding	Yes
3D	Yes
CEC	Yes
ARC	Yes
HDCP	Yes
HDR	Yes
XvYCC Color Space	Yes
POE	Yes
Technical Characteristics	HDBeasT
Resolution	3840 * 2160@60Hz
Transmission Distance	120 meter for 4K@60Hz with CAT6 cable
Clock Bandwidth	600MHz *3
Transmission Speed	18Gbps
Balancing Chip	Automatic equalization
Reclocking	Yes
ESD Protection	Yes
Hot Plug	Yes
Delay	Zero frame-delay
Compression	None
Sampling Rate	Bandwidth Range: 8~16bit
Sampling Ratio	RGB 4:4:4 、YUV 4:4:4、YUV 4:2:2、YUV 4:2:0

Dimensional drawing
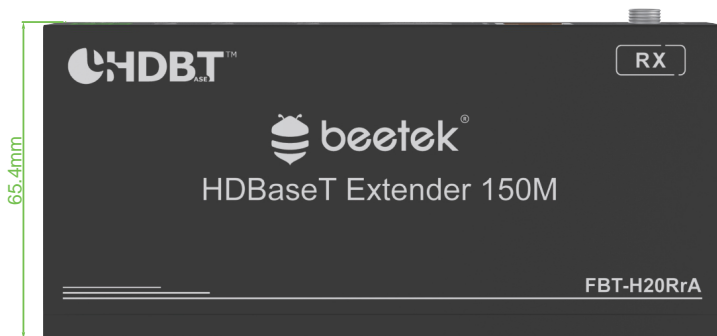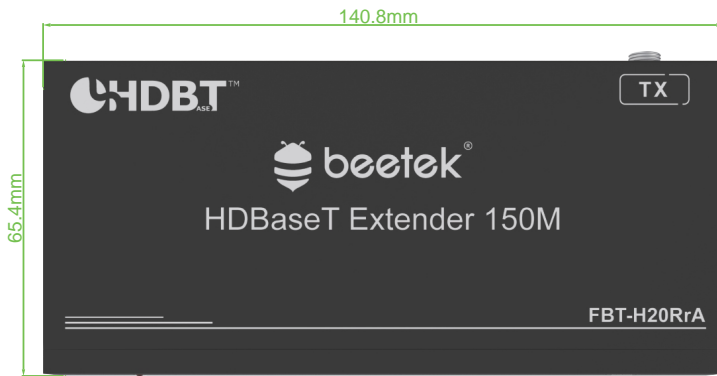
- Dimensions   140.8*65.4*18.5mm
- Weight   TX; 250g ; RX;250g
- Package Dimensions   248*189*79mm
- Packaging Weight   0.9KG

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