
HD50 extender

(Network cable 50 米)

1th Sketch

With rising consumption and demand for high quality HD content, end users are more interested in HD video experience extends to all corners. Users who want to find a way, TVs and other display devices and Blu-ray DVD players and entertainment devices connected to HD multimedia content of the communication. Malls, security, airports, public areas such as LCDTV, TV wall, LED screen display device, where HD display devices often need a long cable and complex wiring, DVI and HDMI obviously does not meet the length and cost of demand, now commonly used in analog video and audio HD video transmission also has been unable to meet demand.

And some of the existing technologies in terms of bandwidth limitations, cannot support uncompressed video. HD multimedia content in all areas of audio and video communication market and the inadequacies of existing technologies to promote electronics limited development, production HD digital connection standard for extenders, which can extend the uncompressed HD multimedia content transmission distance increase their range, simplified installation, and reduce overall system cost.

2th product introduction

The product is a high-performance HDMI image transmitter, whose main function is to transmit HDMI image signals over a distance of 50 meters without compression or delay through a network cable, and can support up to 1080P60Hz resolution transmission.

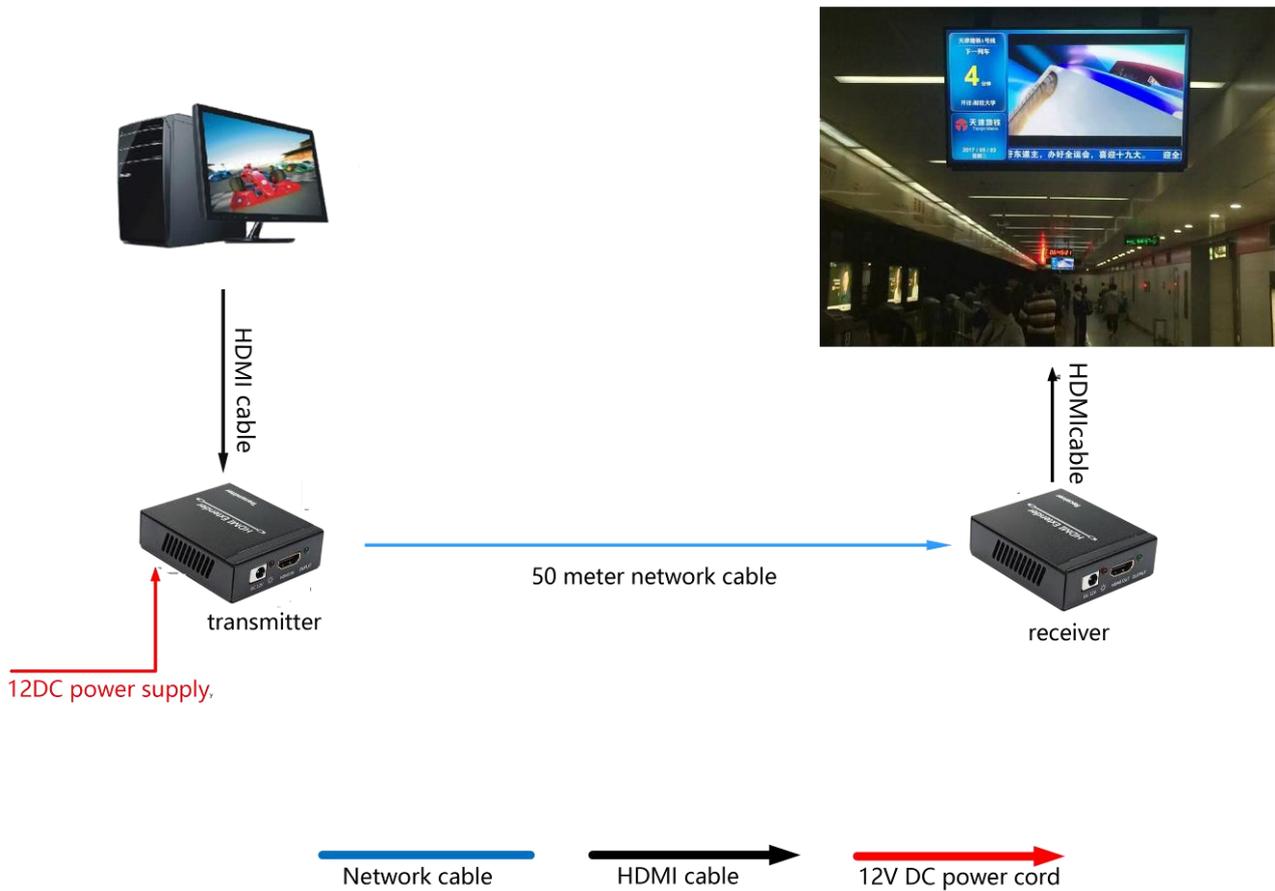
Usually, a high-definition signal extender needs to compress and encode the signal at the sending end into a signal that can be transmitted through a network cable, and then decode the signal into a high-definition video signal at the receiving end. Due to chip bandwidth issues, the image signal needs to be compressed significantly, resulting in a significant decrease in image quality and becoming very unclear. And during the encoding and decoding process, a longer time is required, which leads to a longer delay in the image to the terminal compared to the original image.

Through the unique image transmission and processing technology of high-definition image transmitters, high-definition video images can be transmitted to display terminals without compression or delay.

3th main functions

- 1、 Supports full HD 1080p@60Hz HDMI signal transmission;
- 2、 1080p full HD signal can be extended by 50 meters through network cables;
- 3、 Support non compression and non delay transmission of HDMI image signals;
- 4、 Support 3.5mm audio output;
- 5、 Adopting POC power supply technology, only one end of the transmitter or receiver needs to be supplied with 12V power supply;

4th Illustration of commonly used solutions



Customer requirements:

As shown in the above figure, the customer's equipment room is 50 meters away from the display screen, and it is required to transmit the HDMI signal output from the high-definition screen in the equipment room to the station display screen for display. The user requires the transmitted image to have no delay, no compression, and stable operation for 7x24 hours. In addition, users want to save space and reduce the use of power strips, which requires a good design solution from the engineering company.

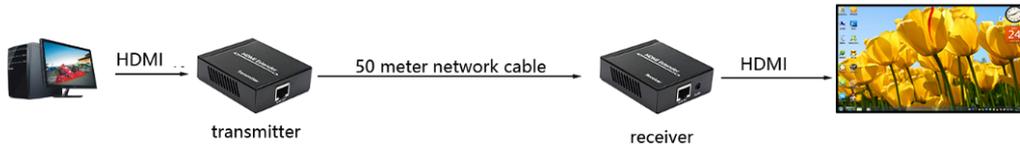
The customer's requirements can be easily achieved through the network cable extender:

1. Only one network cable is needed to achieve the transmission of HDMI signals up to 50 meters, ensuring lossless image quality and no delay after image transmission;
2. By using POC power supply technology, users only need to connect a 12V power supply at one end of the transmitter or receiver, which can greatly reduce the number of rows and plugs when multiple pairs of transmitters are needed and save space.
3. The product adopts the most mature and stable solution recognized in the current market, and users do not need to worry about equipment stability issues.

5th Appearance



5th System topology diagram



8th、 Specification

Item	specification
HDMI signal	HDMI1.3, HDCP1.3, support for the 8-bit color
Supported resolution	Input support 480i/480P/576i/576P/720P/1080P, output support 1080P
Audio	3.5mm audio
Network cable	CAT5E、CAT6、CAT6A、CAT7
Transmission distance	50m Up to 1080P60Hz 36bpp
Power supply	DC12V/0.5A *1pcs
Power consumption	<2.5W
Product size	68(L)×58(W)×21(H) mm *2pcs
Packaging size and weight	Length (157mm) x width (99mm) x height (72mm) Gross weight: 0.3kg
Body material	Metal
Net weight	TX:100g RX:100g
Colour	black