EIKI

Overview

HE20 embedded wall panel transmitter using HDBaseT technology to transmit video, audio and control signals (can be used with the matrix), and HDBaseT series interface products are fully compatible. Support CVBS, YPbPr, VGA, DVI, HDMI signal transmission and IR, RS232 pass through function, DC 12V / 2A power supply and support POC power supply.

This product is mainly used in radio and television engineering, multimedia conference hall, TV teaching, command and control center and other occasions.

Features

● Support CV, YPbPr, VGA, DVI, HDMI video and audio signal transmission;

● Support the input source signal automatically switches the adaptive function;

● Support output resolution adjustable, up to 1080P @ 60;

● Support IR, RS-232 pass through function;

● Use CAT5 UTP cable to transmit (up to 100M).

● Support POC power supply function.

Specification

Model	VIS-HE20			
Analog Video Input				
Interface	VGA PORT			
Signal type	CV	YPbPr	Y/C	VGA
Gain	0dB	0 dB	0dB	0 dB
Bandwidth	150MHz @ -3dB	350MHz @ -3dB	150MHz@-3dB	380 MHz
Differential phase error	0. 1°,3.58-4.43 MHz	0. 1°, 3.58-4.43 MHz	0. 1°,3.58-4.43 MHz	
Differential gain error	0. 1%, 3.58-4.43 MHz	0. 1%, 3.58-4.43 MHz	0. 1%, 3.58-4.43 MHz	
Signal strength	1V p-p: (CVBS)	1V p-p: (Y part) 0.3Vp-p: (PbPr/CbCr part)	1V p-p: S terminal(Y/C)	0.63V p-p to 0.9 V p-p
Minimum / maximum level	Analog signal: -2V/+2V	Analog signal: -2V/+2V	Analog signal : -2V/+2V	RGB signal: 0V/ 1.0V HV Signal : 0V/5.0V
input resistance	75 Ω	75Ω	75 Ω	75Ω
Return loss	<-30dB@5MHz	<-30dB@5MHz		<-30dB@5MHz
HDMI input				
Protocol	HDMI1.3a, DVI1.0, HDCP1.3			
Pixel bandwidth	Pixel bandwidth 165MHz, full digital			
Interface bandwidth	2.25Gbps, full digital （Total 6.75Gbps, each color 2.25Gbps）			
Max. Resolution	PC: 1920x1200@60_24bit HDTV: 1920x1080P@60_36bit			
Clock Jitter	<0. 15 Tbit			
Risetime	<0.3Tbit (20%--80%)			
Falltime	<0.3Tbit (20%--80%)			
Signal type	HDMI 1.3a /DVI 1.0 define HDM/DVI-D full digital T.M.D.S. signal			
Interface	HDMI-A (Type A connector)			
Signal strength	T.M.D.S. 3.3V p-p			
Minimum / maximum level	T.M.D.S. 2.9V/3.3V			
Resistance	50 Ω			
Maximum DC offset error	+/- 15mV			
Recommended maximum input distance	Less than 15m under 1920x1080 with quality cable			

EIKI HE20 HDMI/VGA to HDBaseT Wallplate

Input EDID	Use the system default EDID
RS-232	
Interface	Input 3PIN-3.81mm
Signal type	Digital
Level type	RS232 level
Signal direction	Two-way communication
Baud rate	Min:4800bps, Max:115200bps
Data bit	8 bits
Stop bit	1 bit
Correction bit	None
Flow control	None
Level delay	500 ns
Level peak	+/- 15V
IR signal	
Interface	Input/output: 4PIN-3.81mm phoenix
Signal type	Input; digital Output: digital
Output level type	PLL level
Wavelength	850nm
Input level carrier frequency	38KHz
Link input/output	
Interface	RJ45 port
Support Protocol	HDBaseT protocol; full support HDMI1.4 protocol 3D part, including support for all HDMI1.4 agreement in the mainstream 3D display mode, but does not include 3D_ 1080P @ 120Hz, backward compatible with HDMI1.3 standard, HDCP1.3 protocol, DVI1. 0 protocol.
PIXEL bandwidth	Pixel bandwidth 225MHz, full digital
Interface bandwidth	6.75bps （RGB:2.25 Gbps/per lane）
Max. Resolution	Normal-PC: 1600x1200P@60_24bit, HDPC: 1920x1200P@60_24bit; HDTV: 1920x1080P@60_36bit; 3D Format: 1920x 1080P@24_36bit
Signal type	HDBaseT protocol defined in the high-speed differential signal
Max. input/output distance	Max. 100m with 1920x1080@60Hz with CAT5E/CAT6/CAT7
Specification	
Power supply	+12V
Temperature	-20°˜ +70°C
Humidity	10% ˜90%

HE10/HE7

HDBaseT extender for 100m/70m

Overview

The HE10 / HE7 HDMI Extender over cat5e/cat6 is to extend the HDMI signal over long distances to a compatible display. It is designed to convert HDMI signal to standard HDBaseT signal and transmit by Cat5e/6 cable. It also transmit Bi-directional Infrared signal together with the HDMI signal, capable of controlling the source in the device side out to 100 meters or 70 meters, or from source to device, RS232 pass through makes it more convenient to be controlled.

Features

- Allow HDMI signal/IR transmit up to 100 meters or 70 meters over Cat5e/6 cable
- HDMI signal from 1080P to 4Kx2K, 3D video format support, HDCP compliance
- IR signal/RS232 pass through together with HDMI over Cat5e/6 cable bi-directionally for remote control Ultra Light&thin case design for easy installing

System Diagram

Specification

HDMI video interface	HE7	HE10
Protocol support	HDMI1.4, HDCP1.3, EDID1.4	
Pixel bandwidth	330MHz	
Interface bandwidth	10.2Gbps	
Maximum resolutions	1900x1200@60Hz, 3840X2160@30Hz HDTV: 1920x1080P@60Hz; BD: 4Kx2K@30Hz	
Signal type	HDMI 1.4 / T.M.D.S.	
IN/OUT interface	HDMI type A, female; HDBaseT	
Transmission Distance	1080P video signal can be transmitted up to 70m by CAT5e/6	1080P video signal can be transmitted up to 100m by CAT5e/6
	4K vide signal can be transmitted up to 40m	4K vide signal can be transmitted up to 70m
Signal amplitude	T.M.D.S. +/- 0.4Vpp	
Min/Max Voltage	T.M.D.S. 2.9V/3.3V	
Input impedance	100Ω	
Dimensions	135mmX75mmX15mm	
Control interface		
Serial	RS232 (3PIN 3.5mm)	
Baud	110- 115200bps	
IR control	IR (3.5MM)	
IR frequency	38K	
ETHERNET	RJ45	
Power supply	12V DC	
Maximum dissipation	8.3W	