



EHE20

HDMI/VGA to HDBaseT Wallplate



Overview

EHE20 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. Supports 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 325ft / 100m).
- Support POC power supply function.

Specification

Analog Video Input				
Interface	VGA Port			
Signal Type	CV	YPbPr	Y/C	VGA
Bandwidth	150MHz @ -3dB	350MHz @ -3dB	150MHz @ -3dB	380MHz
Differential Phase Error	0.1"	0.1"	0.1"	
Differential Gain Error	0.1%	0.1%	0.1%	
Signal Strength	1V p-p: CVBS	1V p-p (Y) 0.3V p-p (PbPr)	1V p-p S Terminal (Y/C)	0.63-0.9V p-p
Min/Max 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	75 Ω	75 Ω	75 Ω
Return Loss	<-30dB@5MHz	<-30dB@5MHz		<-30dB@5MHz
Digital Video Input				
Interface	HDMI-A (Type A connector)			
Protocol	HDMI 1.3A, DVI 1.0, HDCP1.3			
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	<0.3 Tbit (20%-80%)			
Falltime	<0.3 Tbit (20%-80%)			
Signal Type	HDMI 1.3A / DVI 1.0 define HDM/DVI-D full digital T.M.D.S. signal			
Signal Strength	T.M.D.S. 3.3V p-p			
Min/Max Level	T.M.D.S. 2.9V/3.3V			
Resistance	50 Ω			
Maximum DC Offset Error	+/- 15 mV			
Recommended Maximum Input Distance	Less than 50ft (15m) under 1920x1080 with quality cable			
Input EDID	Use the system default EDID			
RS-232				
Interface	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	4PIN – 3.81mm phoenix
Signal Type	Digital
Output Level Type	PLL Level
Wavelength	850nm
Input Level Carrier Freq.	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 mainstream 3D display mode, but does not include 3D_1080p @ 120Hz, backward compatible with HDMI1.3 standard, HDCP1.3 protocol, DVI 1.0 protocol
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: 1920x1080p @ 24_36bit
Signal Type	HDBaseT protocol defined in the high-speed differential signal
Maximum Input/Output Distance	325ft (100m) with 1920x1080 @60Hz with CAT5E/CAT6/CAT7
Specifications	
Power Supply	+12V
Temperature	-20° ~ +70° C
Humidity	10% ~ 90%