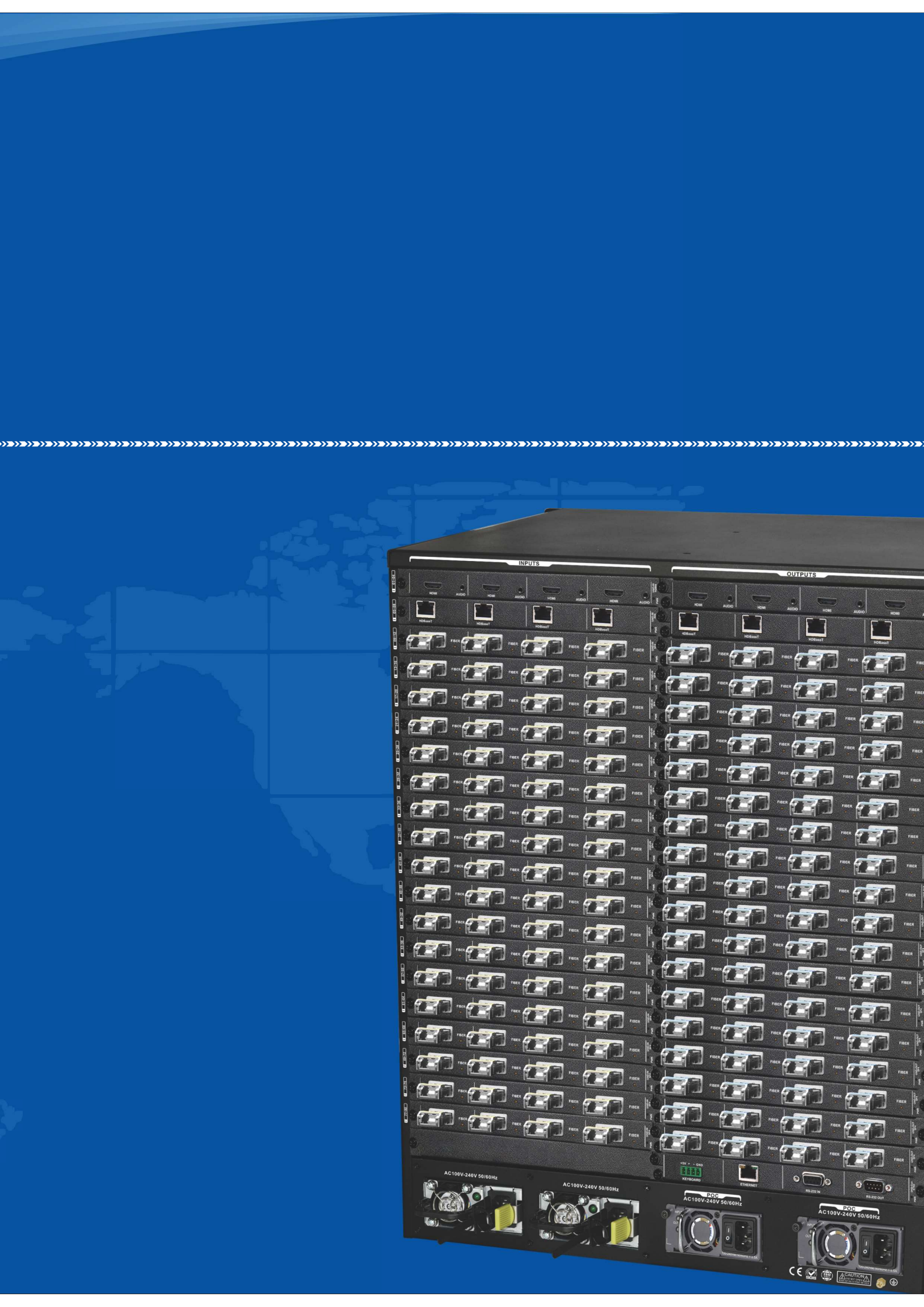


A

CREATOR[®]
Audio/Visual Solution Provider & Manufacturer

**Signal Management and
Extenders**





ESP-MAX Series Hybrid Video Wall Processor

ESP-MAX0808/1616/3636/7272/160160



ESP-MAX0808
Size(mm): 482.6(L)×400(W)×132.5(H)



ESP-MAX1616
Size(mm): 482.6(L)×400(W)×177(H)



ESP-MAX3636
Size(mm): 482.6(L)×400(W)×310.3(H)



ESP-MAX7272
Size(mm): 482.6(L)×400(W)×532.7(H)



ESP-MAX160160
Size(mm): 482.6(L)×400(W)×1110.4(H)

Product overview

The ESP-MAX series video wall processor is a flexible video wall and seamless switching matrix. This matrix adopts high-performance hardware design, perfectly supporting the switching and processing of various high-definition digital/analog signals, and supporting the distribution and switching functions of two-way RS-232 signals. It can also divide a complete image signal into multiple parts, distribute them to multiple display units, and form a large display screen to display dynamic images. It provides a one-stop solution for the distribution and switching processing of various video and control signals in various industries. It can be widely used in places such as radio and television engineering, multimedia conference halls, large screen display engineering, television teaching, intelligent traffic management centers, command and control centers, and so on.

The ESP-MAX series splicing processor includes models 0808, 1616, 3636, 7272, 160160, and other models. Its signal input/output interfaces include HDMI, DVI, SDI, optical fiber, and other video interfaces. Leading all digital signal processing technology ensures signal distortion free processing, delivering the highest quality images to display terminals. Through customized configuration of various identical or different input/output cards, you can form a single interface type or multiple interface type matrix, such as fiber matrix, HDMI matrix, DVI matrix, CAT5 matrix, VGA matrix, YUV matrix, Video matrix, and so on.

The ESP-MAX series video wall processor provides multiple control modes, RS-485 extended keyboard operation, and also provides 2-way standard RS-232 communication interfaces and network ports, facilitating the use of various remote control devices by users.

Features

- Fully digital switching, each seamless output card can achieve truly real-time seamless switching;
- Each video wall output card can achieve video splicing, and the image window can be arbitrarily scaled, superimposed, and roamed within the full screen range. When calling the plan, opening the window, and moving the window, the image is consistent without black screen;
- The video wall card supports scrolling subtitle banners (real-time clock), base image uploading, and subtitle overlay functions;
- Video wall card supports single port custom resolution output to achieve complete splicing display, and supports single card windowing with 16 layers;
- The preview card can achieve the function of video grouping preview and switching. A single card can support up to 16 previews, and multiple preview cards can be added according to the usage scenario. At the same time, it supports the full screen splicing echo function of 60 frames;
- supports DVI 1.0 protocol, conforms to HDCP 1.3 standard, and is compatible with HDMI 1.3a;
- Support hot plugging and simultaneous switching of audio and video signals;
- The HDMI input card supports selective input of digital audio and analog audio, and the HDMI output card outputs both digital audio and analog audio simultaneously;
- Support PC software control switching and EDID management;
- Support preview and manipulation functions of mobile terminals (IOS, Android, and Windows), and support Web page control.
- Flexible control mode, with RS-485 and RS-232 communication interfaces and network ports, and can be controlled through the serial port of remote optical fiber, which is convenient for users to cooperate with various remote control devices;
- Support online firmware upgrades;
- Support character overlay to meet font, size, background, and other requirements;
- Support a maximum resolution of 4K x 2K;
- SDI input card with loop out function;
- Plug-in structure design, flexible configuration of input/output signal types and number of signal channels;
- Support removable fans and flexibly configure various types of fans;
- Hard synchronization of input and output to ensure consistency of video playback;
- Output channel supports mixed insertion of input and output boards;
- The ESP-MAX series processor has a redundant power supply design, and the ESP-MAX 3636 and above matrices have detachable power supplies;
- ESP-MAX3636 and above matrix power supplies have intelligent control functions: provide primary and standby power supplies, automatically switch power usage, query power status, configure power fan speed, and provide power alarm functions;
- The software supports visual graphic display of board fault detection;
- The equipment can visually display the current equipment status (input/output signal status);
- Support dual control card backup, automatic data backup and recovery.

Specifications

Parameter Name	ESP-MAX 0808	ESP-MAX 1616	ESP-MAX 3636	ESP-MAX 7272	ESP-MAX 160160	
Interface	The input card can be connected to Quantity /input channels	3/12	7/28	17/68	35/140	79/316
	The output card can be connected to Quantity /output channels	2/8	4/16	9/36	18/72	40/160
	Support input card type	EMAX-IN HDMI4; EMAX-IN DVI4; EMAX-IN HD4; EMAX-IN VGA4 ; EMAX-IN SF4; EMAX-IN SDI4; EMAX-IN IP2; EMAX-IN DP4; EMAX-IN Dp2; EMAX-IN HDMI2; EMAX-IN SF2; EMAX-IN HD2; EUHD-IN HDMI4; EUHD-IN ZSF2; EUHD-IN ZSF4				
	Support seamless output card type	EMAX-OUT HDMI4; EMAX-OUT DVI4; EMAX-OUT HD4; EMAX-OUT VGA4; EMAX-OUT SF4; EMAX-OUT SDI4; EMAX-OUT IP2; EMAX-OUT DP4; EMAX-OUT HD2; EMAX-OUT HDIM2; EMAX-OUT SF2; EUHD-OUT HDMI4; EMAX-OUT HDMI4P; EUHD-OUT ZSF4				
	Support video wall card type	EMAX-PJOUT HD4; EMAX-PJOUT DVI4; EMAX-PJOUT SF4; EMAX-PJOUT HD2; EMAX-PJOUT DVI2; EMAX-PJOUT SF2; EUHD-PJOUT HDMI2				
Interface bandwidth	13.5Gbps					
Serial control port	Serial control port	RS-232, 9-pin female D-type interface, 3-pin Phoenix Interface with 9-pin male D-type				
	Baud rate and protocol	Baud rate: 9600, data bits: 8 bits, Stop bit: 1, no parity bit				
	Serial control port pins	9-pin female D-type interface: 2=TX, 3=RX, 5 = GND 9-pin male D-type interface: 2=RX, 3=TX, 5 = GND				
Keyboard control	Keyboard interface	4-bit 3.8mm Phoenix interface				
	Usage	Used with extended keyboard MCP100				
	Interface pins	+5V = D C 5 V, += DATA+, -=DATA-, GND = signal ground				
Ethernet control	Ethernet control interface	RJ-45 female interface				
	Ethernet control protocol	TCP/IP				
	Ethernet control interface rate	Adaptive 10M/100M, full duplex or half duplex				
Specification	Power	100VAC~240VAC, 50/60 Hz, international Adaptive power supply				
	Working temperature	-10°C ~ +55°C				
	Working humidity	20% ~93%				
	Size	3U	4U	7U	12U	25U
	Product weight (excluding any cards)	About 5Kg	About 7Kg	About 16Kg	About 29Kg	About 80Kg
	No-load power consumption	About 18W		About 30W		About 60W
	Mean time between failures	100,000 hours				
	Warranty	1-year free warranty				

HDMI input card

EMAX-IN HDMI4



Features

- 4 HDMI-A interfaces, 4 3.5mm audio input interfaces;
- Input up to a maximum distance of 35M;
- Supports hot swapping and simultaneous switching of audio and video signals;
- Support analog audio and HDMI embedded audio selection input;
- Support EDID reading function;
- Compatible with HDMI1.3a standards, HDCP1.3 protocol, DVI1.0 protocol;
- Maximum supported resolution:
 - HDCP: 1920x1200P@60 ;
 - HDTV: 1920x1080P@60 .

Specifications

Parameter Name	EMAX-IN HDMI4
Protocol	HDMI1.3a standard, HDCP1.3 protocol, DVI1.0 protocol
Gain	0 dB
Pixel bandwidth	165MHz, full digital
Interface bandwidth	2.25Gbps, full digital (total 6.75Gbps, each color is 2.25Gbps)
Supported resolution	800x600@60, 1024x768@60, 1280x768@60, 1280x800@60, 1280x960@60, 1280x1024@60, 1360x768@60, 1366x768@60, 1440x900@60, 1600x900@60, 1600x1200@60, 1920x1080@25, 1920x1080P@30, 1920x1080P@60, 1920x1200P@60, 1920x1080i@50, 1920x1080i@60, 1280x720@60;
Clock jitter	<0.15 Tbit
Bit rise time	<0.3Tbit (20%--80%)
Bit descent time	<0.3Tbit (20%--80%)
Video	
Maximum transmission delay	5nS(±1nS)
Interface	4x HDMI-A interface 4x 3.5mm audio interface
Signal strength	T.M.D.S. +/- 0.4Vpp
Min/Max level	T.M.D.S. 2.9V/3.3V
Impedance	50 Ω
EDID	Optional default EDID and read function
Maximum DC bias error	15mV
Suggested maximum input/output distance	Input less than 15 meters, within 1600x1200@60hz (it is recommended to use certified HDMI dedicated wires, such as Molex TM wires)
Product weight	About 0.5KG
Maximum power consumption	15W

DVI input card

EMAX-IN DVI4



Features

- 4 DVI-D interfaces, 4 3.5mm audio input interfaces;
- Input up to a maximum distance of 35M;
- Supports hot swapping and simultaneous switching of audio and video signals;
- Support analog audio input;
- Support EDID reading function;
- Compatible with HDMI1.3a standards, HDCP1.3 protocol, DVI1.0 protocol;
- Maximum supported resolution:
 - HDCP: 1920x1200P@60 ;
 - HDTV: 1920x1080P@60 .

Specifications

Parameter Name	EMAX-IN DVI4
Protocol	DVI1.0 protocol
Gain	0 dB
Pixel bandwidth	165MHz, full digital
Interface bandwidth	2.25Gbps, full digital (total 6.75Gbps, each color is 2.25Gbps)
Supported resolution	800x600@60, 1024x768@60, 1280x768@60, 1280x800@60, 1280x960@60, 1280x1024@60, 1360x768@60, 1366x768@60, 1440x900@60, 1600x900@60, 1600x1200@60, 1920x1080@25, 1920x1080P@30, 1920x1080P@60, 1920x1200P@60, 1920x1080i@50, 1920x1080i@60, 1280x720@60;
Clock jitter	<0.15 Tbit
Bit rise time	<0.3Tbit (20%--80%)
Bit descent time	<0.3Tbit (20%--80%)
Video	
Maximum transmission delay	5nS(±1nS)
Interface	4x DVI-D female interface 4x 3.5mm audio interface
Signal strength	T.M.D.S. +/- 0.4Vpp
Min/Max level	T.M.D.S. 2.9V/3.3V
Impedance	50 Ω
EDID	Optional default EDID and read function
Maximum DC bias error	15mV
Suggested maximum input/output distance	Input less than 35 meters, within 1600x1200@60hz (it is recommended to use certified DVI dedicated wires, such as Molex TM wires)
Product weight	About 0.5KG
Maximum power consumption	15W

SDI input card

EMAX-IN SDI4



Features

- 4 BNC female interfaces, 4 BNC female interfaces ring out;
- Support hot swapping;
- Support SD-SDI/HD-SDI/3G SDI signal input.

Specifications

Parameter Name	EMAX-IN SDI4	
Interface	4x BNC input, 4x BNC loop out	
Video	Supported protocol	SMPTE 425M, SMPTE 424M, SMPTE 292M, SMPTE 259M-C, DVB-ASI
	Interface bandwidth	2.970Gb/s, 1.485Gb/s, 270Mb/s,
	Supported resolution	1920x1080@25, 1920x1080P@30, 1280x720@60, 1280x720@50, 1920x1080P@60, 1920x1080i@50, 1920x1080i@60;
	Supported format	SD-SDI/HD-SDI/3G-SDI
Product weight	About 0.5KG	
Maximum power consumption	20W	

Fiber input card

EMAX-IN SF4



Features

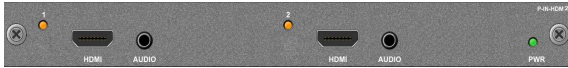
- 4 single core single mode fiber inputs, LC interface;
- Support hot swapping;
- Equipped with a fiber optic transmitter, it can achieve input signal transmission of 20 kilometers;
- Optional IO switching card can achieve serial port switching;
- Input maximum supported resolution:
 HDCP: 1920x1200P@60 ;
 HDTV: 1920x1080P@60 .

Specifications

Parameter Name	EMAX-IN SF4	
Interface	4x high-speed single core single-mode LC fiber optic interface	
Video	Optical interface	LC connector
	Optical type	Single Mode
	Wavelength	1310nm-1620nm
	Interface bandwidth	Forward: 6.25Gbps, Reverse: 250Mbps
	Clock jitter	<0.15 Tbit
	Bit rise time	<0.3Tbit (20%--80%)
	Bit descent time	<0.3Tbit (20%--80%)
	Suggested maximum input distance	Single mode fiber: 2-20 kilometers, 1920x1080p@60
	Supported resolution	800x600@60, 1024x768@60, 1280x720@60, 1280x768@60, 1280x800@60, 1280x960@60, 1280x1024@60, 1360x768@60, 1366x768@60, 1440x900@60, 1600x900@60, 1600x1200@60, 1920x1080P@60, 1920x1200P@60, 1920x1080i@50, 1920x1080@60;
	Product weight	About 0.5KG
Maximum power consumption	20W	

4K HDMI input card

EMAX-IN HDMI2



Features

- Two HDMI-A interfaces and two 3.5mm audio input interfaces;
- Input up to a maximum distance of 35M;
- Supports hot swapping and simultaneous switching of audio and video signals;
- Support analog audio and HDMI embedded audio selection input;
- Support EDID reading function;
- Compatible with HDMI1.4a standards, HDCP1.4 protocol, DVI1.0 protocol;
- Maximum supported resolution: 3840x2160P@30 .

Specifications

Parameter Name	EMAX-IN HDMI2	
Protocol	HDMI1.4a standard, HDCP1.4 protocol, DVI1.0 protocol	
Video	Gain	0 dB
	Pixel bandwidth	165MHz, full digital
	Interface bandwidth	4.5Gbps, full digital (total 6.75Gbps, each color is 2.25Gbps)
	Supported resolution	800x600@60, 1024x768@60, 1280x720@60, 1280x768@60, 1280x800@60, 1280x960@60, 1280x1024@60, 1360x768@60, 1366x768@60, 1440x900@60, 1600x900@60, 1600x1200@60, 1920x1080@25, 1920x1080P@30, 1920x1080P@60, 1920x1200P@60, 1920x1080i@50, 1920x1080i@60; 3840x2160@30
	Clock jitter	<0.15 Tbit
	Bit rise time	<0.3Tbit (20%--80%)
	Bit descent time	<0.3Tbit (20%--80%)
	Maximum transmission delay	5nS(±1nS)
	Interface	2x HDMI-A interface 2x 3.5mm audio interface
	Signal strength	T.M.D.S. +/- 0.4Vpp
	Min/Max level	T.M.D.S. 2.9V/3.3V
	Impedance	50 Ω
	EDID	Optional default EDID and read function
	Maximum DC bias error	15mV
	Suggested maximum input/output distance	Input less than 7 meters, within 1600x1200@60hz (it is recommended to use certified HDMI dedicated wires, such as Molex TM wires)
	Product weight	About 0.5KG
	Maximum power consumption	15W

4K HDBaseT input card

EMAX-IN HD2



Features

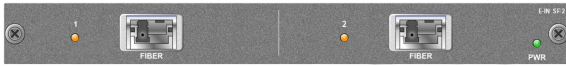
- 2 high-speed RJ45 interface, 2 3PIN Phoenix interface;
 - Using CAT5e/6 wire input with a maximum distance of 100m;
 - Supports hot swapping and simultaneous switching of audio and video signals;
 - Support serial port input, optional IO switching card, which can achieve serial port switching;
 - Compatible with HDBaseT protocol;
- Maximum supported resolution: 3840x2160P@30 .

Specifications

Parameter Name	EMAX-IN HD2	
Interface	2x high-speed RJ45 interface, 2x 3PIN Phoenix interface	
Video	Protocol	HDBaseT protocol
	Pixel bandwidth	165MHz, full digital
	Interface bandwidth	4.5Gbps, full digital (total 6.75Gbps, each color is 2.25Gbps)
	Maximum resolution	3840x2160P@30Hz
	Signal type	High speed differential signal defined in HDBaseT protocol
	POC	With POC power supply (+48V), POC power supply needs to be used in conjunction with our company's CAT5 series transmitters. The input port of this card can provide power to it through a network cable. Note: This card cannot be connected to a sending device with POC power supply.
	Impedance	50 Ω
	EDID	Optional default EDID function
	Max DC bias error	15mV
	Suggested maximum input/output distance	Maximum of 100 meters, within 1600x1200@60hz (Recommend using NEXANS CAT5e/6 dedicated wire)
	Product weight	About 0.5KG
	Maximum power consumption	27W

4K fiber input card

EMAX-IN SF2



Features

- 2-way single core fiber input;
- Support hot swapping;
- Equipped with a fiber optic transmitter, it can achieve a maximum input signal transmission of 20Km (single mode);
- Maximum supported resolution: 3840x2160P@30 .

Specifications

Parameter Name		EMAX-IN SF2
Interface	2x high-speed single core LC fiber optic interface	
Video	Optical interface	LC connector
	Optical type	Multimode/Single Mode(optional)
	Wavelength	Multimode 850nm/Single Mode: 1310nm-1620nm(optional)
	Interface bandwidth	Forward: 6.25Gbps, Reverse: 3.125Gbps
	Clock jitter	<0.15 Tbit
	Bit rise time	<0.3Tbit (20%~80%)
	Bit descent time	<0.3Tbit (20%~80%)
	Suggested maximum input distance	Single mode fiber: 2-20 kilometers, 1920x1080p@60
	Maximum resolution	3840x2160P@30Hz
	Product weight	About 0.5KG
Maximum power consumption	20W	

HDBaseT input card

EMAX-IN HD4



Features

- 4 high-speed RJ45 interfaces, 4 3PIN Phoenix interface;
- Using CAT5e/6 wire input with a maximum distance of 100m;
- Supports hot swapping and simultaneous switching of audio and video signals;
- Support serial port input, optional IO switching card, which can achieve serial port switching;
- Compatible with HDBaseT protocol;
- Maximum supported resolution:
 - HDPC: 1920x1200P@60Hz ;
 - HDTV: 1920x1080P@60Hz .

Specifications

Parameter Name		EMAX-IN HD4
Interface	4x high-speed RJ45 interface, 2x 3PIN Phoenix interface	
Video	Protocol	HDBaseT protocol
	Pixel bandwidth	165MHz, full digital
	Interface bandwidth	2.25Gbps, full digital (total 6.75Gbps, each color is 2.25Gbps)
	Maximum resolution	HDPC: 1920x1200P@60Hz HDTV: 1920x1080P@60Hz
	Signal type	High speed differential signal defined in HDBaseT protocol
	Impedance	50 Ω
	EDID	Optional default EDID function
	Max DC bias error	15mV
	Suggested maximum input/output distance	Maximum of 100 meters, within 1600x1200@60hz (Recommend using NEXANS CAT5e/6 dedicated wire)
	Product weight	About 0.5KG
Maximum power consumption	27W	

VGA input card

EMAX-IN VGA4



Features

- 4 DB15 female interface input, 4 3.5mm audio input interface;
- Supports any signal input of VGA, CVBS, YPbPr, and can automatically recognize the input
- Input signal source;
- Supports hot swapping and simultaneous switching of audio and video signals;
- Support analog audio input;
- Maximum supported resolution:
HDCP: 1920x1200P@60Hz ,
HDTV: 1920x1080P@60Hz .

Specifications

Parameter Name	EMAX-IN VGA4			
Interface	4x DB15 interface, 4x 3.5mm audio interface			
Video	Signal type	CVBS	YPbPr	VGA
	Gain	0dB	0dB	0dB
	Bandwidth	150MHz@-3dB	350MHz@-3dB	380MHz
	Differential phase error	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	—
	Signal strength	1Vpp: CVBS	1Vpp: (Y in YPbPr) 0.3Vpp: (PbPr/CbCr in YPbPr)	0.63Vpp to 0.9Vpp
	Min/Max level	Analog signal: -2V/+2V	Analog signal: -2V/+2V	RGB signal: 0V/1.0V HV signal: 0V/5.0V
	Impedance	75 Ω	75 Ω	75 Ω
	Returnloss	<-30dB@5MHz	<-30dB@5MHz	<-30dB@5MHz
	Product weight	About 0.5KG		
Maximum power consumption	20W			

DP input card

EMAX-IN DP4



Features

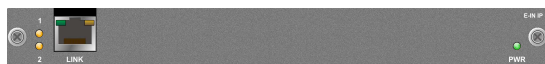
- 4 DP interface, 4 3.5mm audio input interface;
- Supports hot swapping and simultaneous switching of audio and video signals;
- Support analog audio and DP embedded audio selection input;
- Support the EDID reading function;
- Compatible with DP1.1 standards;
- Maximum supported resolution:
HDCP: 1920x1200P@60Hz ,
HDTV: 1920x1080P@60Hz .

Specifications

Parameter Name	EMAX-IN DP4	
Protocol	DP 1.1 protocol;	
Video	Gain	0 dB
	Pixel bandwidth	165MHz, full digital
	Interface bandwidth	2.25Gbps, full digital (total 6.75Gbps, each color is 2.25Gbps)
	Supported resolution	800x600@60, 1024x768@60, 1280x720@60, 1280x768@60, 1280x800@60, 1280x960@60, 1280x1024@60, 1360x768@60, 1366x768@60, 1440x900@60, 1600x900@60, 1600x1200@60, 1920x1080i@50, 1920x1080i@60, 1920x1080P@60, 1920x1200P@60;
	Clock jitter	<0.15 Tbit
	Bit rise time	<0.3Tbit (20%--80%)
	Bit descent time	<0.3Tbit (20%--80%)
	Maximum transmission delay	5nS(±1nS)
	Interface	4x DP dual link interface, 4x 3.5mm audio interface
	Signal strength	T.M.D.S. +/- 0.4Vpp
	Min/Max level	T.M.D.S. 2.9V/3.3V
	Impedance	50 Ω
	EDID	N/A
	Maximum DC bias error	15mV
	Suggested maximum input/output distance	Input less than 35 meters, within 1600x1200@60hz (it is recommended to use certified DP dedicated wires, such as Molex TM wires)
	Product weight	About 0.5KG
	Maximum power consumption	15W

IP input card

EMAX-IN IP4



Features

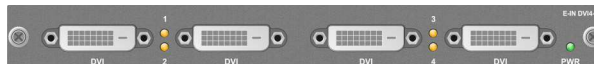
- 1 High speed RJ45 interface;
- Using CAT5e/6 wire input with a maximum distance of 100m;
- Support web login to set network protocols, local network parameters, or remote network parameters and other parameters;
- Receive fixed IP address videos or automatically search for encoding devices on the network;
- Support network protocols such as onvif, RTP, RTSP, RTCP, TCP, UDP, etc;
- Support G711a, G711u, G726, and ADPCM audio encoding;
- Support mainstream cameras such as Hikvision, Dahua, and Huawei; Maximum supported resolution: 1920x1080P@60 .

Specifications

Parameter Name	EMAX-IN IP4	
Network protocol	Onvif, RTP, RTSP, RTCP, TCP, UDP	
Video	Network interface bandwidth	1000M
	Video compression	H.264 MainProfile/H.264 Baseline Profile /H.264 HighProfile
	Audio compression	G711a, G711u, G726, ADPCM
	Control protocol	Support standard protocol ONVIF
	Maximum transmission delay	100ms (depending on encoding delay and network transmission delay)
	Bit descent time	<0.3Tbit (20%--80%)
	Suggested maximum input/output distance	100m
	Maximum supported resolution	1920x1080P@60
Product weight	About 0.5KG	
Maximum power consumption	25W	

DVI input card

EMAX-IN DVI4-D



Features

- 4 DVI-D interfaces;
- Supports hot swapping and simultaneous switching of audio and video signals;
- Support EDID reading function;
- Compatible with HDMI1.3a standards, HDCP1.3 protocol, DVI1.0 protocol;
- Maximum supported resolution:
HDCP: 1920x1200P@60 ;
HDTV: 1920x1080P@60 .

Specifications

Parameter Name	EMAX-IN DVI-D4		
Protocol	DVI 1.0 protocol;		
Video	Gain	0 dB	
	Pixel bandwidth	165MHz, full digital	
	Interface bandwidth	2.25Gbps, full digital (total 6.75Gbps, each color is 2.25Gbps)	
	Supported resolution	800x600@60, 1024x768@60, 1280x720@60, 1280x768@60, 1280x800@60, 1280x960@60, 1280x1024@60, 1360x768@60, 1366x768@60, 1440x900@60, 1600x900@60, 1600x1200@60, 1920x1080i@50, 1920x1080i@60, 1920x1080P@60, 1920x1200P@60;	
	Clock jitter	<0.15 Tbit	
	Bit rise time	<0.3Tbit (20%--80%)	
	Bit descent time	<0.3Tbit (20%--80%)	
	Maximum transmission delay	5nS(±1nS)	
	Interface	4x DVI-D interface	
	Signal strength	T.M.D.S. +/- 0.4Vpp	
	Min/Max level	T.M.D.S. 2.9V/3.3V	
	Impedance	50 Ω	
	EDID	Optional default EDID function	
	Maximum DC bias error	15mV	
	Suggested maximum input/output distance	Input less than 35 meters, within 1600x1200@60hz (it is recommended to use certified DVI dedicated wires, such as Molex TM wires)	
	Product weight	About 0.5KG	
	Maximum power consumption	15W	

4K60 HDMI input card

EUHD-IN HDMI4



Features

- 4 HDMI-A interface, 3.5mm audio stand;
- Input a maximum distance of 7M;
- Supports hot swapping and simultaneous switching of audio and video signals;
- Supports analog audio and HDMI embedded audio selection input;
- With signal transmission indicator light, supporting EDID reading function;
- Supports the HDMI2.0a standard and HDCP1.4 protocol;
- Maximum supported resolution: 4Kx2K@60 .

Specifications

Parameter Name	EUHD-IN HDMI4
Protocol	HDMI 2.0 standard, HDCP 2.0 protocol, DVI 1.0 protocol
Gain	0 dB
Pixel bandwidth	297MHz, full digital
Interface bandwidth	4.5Gbps, full digital (total 13.5Gbps, each color is 4.5Gbps)
Supported resolution	800x600@60, 1024x768@60, 1280x720@60, 1280x768@60, 1280x800@60, 1280x960@60, 1280x1024@60, 1360x768@60, 1366x768@60, 1600x900@60, 1600x1200@60, 1920x1080P@60, 1920x1200P@60, 3840x2160P@30, 3840x2160P@60
Clock jitter	<0.15 Tbit
Bit rise time	<0.3Tbit (20%--80%)
Bit descent time	<0.3Tbit (20%--80%)
Maximum transmission delay	5nS(±1nS)
Interface	4x HDMI dual link interface, 4x 3.5mm audio interface
Signal strength	T.M.D.S. +/- 0.4Vpp
Min/Max level	T.M.D.S. 2.9V/3.3V
Impedance	50 Ω
EDID	N/A
Maximum DC bias error	15mV
Suggested maximum input/output distance	Input less than 5 meters(Recommend using certified specialized wires, such as Molex TM wires)
Product weight	About 0.5KG
Maximum power consumption	20W

4K60 fiber input card

EUHD-IN ZSF4



Features

- 4 single core fiber seamless input;
 - Support hot swapping;
- Equipped with fiber optic transmitters, it can achieve output signal transmission up to 20km;
- With signal transmission indicator light;
 - Input maximum supported resolution: Maximum supported resolution: 3840x2160P@60 .

Specifications

Parameter Name	EUHD-IN ZSF4
Interface	4x high-speed single core LC fiber optic interface
Optical interface	LC connector
Optical type	Single Mode
Wavelength	Single Mode: 1310nm-1620nm(optional)
Interface bandwidth	Forward: 6.25Gbps, Reverse: 3.125Gbps
Clock jitter	<0.15 Tbit
Bit rise time	<0.3Tbit (20%--80%)
Bit descent time	<0.3Tbit (20%--80%)
Suggested maximum input distance	Single mode fiber: 2-20 kilometers, 1920x1080p@60
Maximum resolution	3840x2160P@30Hz
Product weight	About 0.5KG
Maximum power consumption	20W

4K60 HDMI output card

EUHD-OUT HDMI4



Features

- 4 HDMI-A interface seamless output, 3.5mm audio stand;
- Input a maximum distance of 7M;
- Supports hot swapping and simultaneous switching of audio and video signals;
- Supports analog audio and HDMI embedded audio selection input;
- With signal transmission indicator light, supporting EDID reading function;
- Maximum supported resolution: 4Kx2K@60 .

Specifications

Parameter Name	EUHD-OUT HDMI4	
Protocol	HDMI 2.0 standard, HDCP 2.0 protocol, DVI 1.0 protocol	
Video	Gain	0 dB
	Pixel bandwidth	297MHz, full digital
	Interface bandwidth	4.5Gbps, full digital (total 13.5Gbps, each color is 4.5Gbps)
	Supported resolution	800x600@60, 1024x768@60, 1280x720@60, 1280x768@60, 1280x800@60, 1280x960@60, 1280x1024@60, 1360x768@60, 1366x768@60, 1600x900@60, 1600x1200@60, 1920x1080P@60, 1920X1200P@60, 3840X2160P@30, 3840X2160P@60
	Clock jitter	<0.15 Tbit
	Bit rise time	<0.3Tbit (20%--80%)
	Bit descent time	<0.3Tbit (20%--80%)
	Maximum transmission delay	5nS(±1nS)
	Interface	4x HDMI dual link interface, 4x 3.5mm audio interface
	Signal strength	T.M.D.S. +/- 0.4Vpp
	Min/Max level	T.M.D.S. 2.9V/3.3V
	Impedance	50 Ω
	EDID	N/A
	Maximum DC bias error	15mV
	Suggested maximum input/output distance	Input less than 7 meters(Recommend using certified specialized wires, such as Molex TM wires)
	Product weight	About 0.5KG
Maximum power consumption	20W	

HDMI 4K video wall output card

EUHD-PJOUT HDMI2



Features

- Support seamless output of 2 HDMI-A interfaces;
- Input a maximum distance of 7M;
- Supports hot swapping and simultaneous switching of audio and video signals;
- With signal transmission indicator light, supporting EDID reading function;
- A single screen can open 4 windows, with signals that can be stacked, roamed, and scaled at will.
- Maximum supported resolution: 4Kx2K@60 .

Specifications

Parameter Name	EUHD-PJOUT HDMI2	
Protocol	HDMI 2.0 standard, HDCP 2.0 protocol, DVI 1.0 protocol	
Video	Gain	0 dB
	Pixel bandwidth	297MHz, full digital
	Interface bandwidth	4.5Gbps, full digital (total 13.5Gbps, each color is 4.5Gbps)
	Supported resolution	800x600@60, 1024x768@60, 1280x720@60, 1280x768@60, 1280x800@60, 1280x960@60, 1280x1024@60, 1360x768@60, 1366x768@60, 1600x900@60, 1600x1200@60, 1920x1080P@60, 1920X1200P@60, 3840X2160P@30, 3840X2160P@60
	Clock jitter	<0.15 Tbit
	Bit rise time	<0.3Tbit (20%--80%)
	Bit descent time	<0.3Tbit (20%--80%)
	Maximum transmission delay	5nS(±1nS)
	Interface	2x HDMI interface
	Signal strength	T.M.D.S. +/- 0.4Vpp
	Min/Max level	T.M.D.S. 2.9V/3.3V
	Impedance	50 Ω
	EDID	N/A
	Maximum DC bias error	15mV
	Suggested maximum input/output distance	Input less than 7 meters(Recommend using certified specialized wires, such as Molex TM wires)
	Product weight	About 0.5KG
Maximum power consumption	20W	

HDBaseT output card

EMAX-OUT HD4



Features

- 4 high-speed RJ45 interface seamless output, 4 3PIN Phoenix RS-232 interface;
- Using CAT5e/6 wire to output a maximum distance of 100m;
- Supports hot swapping and simultaneous switching of audio and video signals;
- Support serial port output, optional IO switching card, can achieve serial port switching;
- Compatible with HDBaseT protocol;
- Maximum supported resolution:
HDPC: 1920x1200P@60Hz ;
HDTV: 1920x1080P@60Hz .

Specifications

Parameter Name	EMAX-OUT HD4	
Interface	4x high-speed RJ45 interface, 4x 3PIN Phoenix interface	
Video	Protocol	HDBaseT protocol
	Pixel bandwidth	165MHz, full digital
	Interface bandwidth	2.25Gbps, full digital (total 6.75Gbps, each color is 2.25Gbps)
	Maximum resolution	HDPC: 1920x1200P@60Hz HDTV: 1920x1080P@60Hz
	Signal type	High speed differential signal defined in HDBaseT protocol
	POC	With POC power supply (+48V), POC power supply needs to be used in conjunction with our company's CAT5 series transmitters. The input port of this card can provide power to it through a network cable. Note: This card cannot be connected to a sending device with POC power supply.
	Impedance	50 Ω
	Max DC bias error	15mV
	Suggested maximum input/output distance	Maximum of 100 meters, within 1600x1200@60hz (Recommend using NEXANS CAT5e/6 dedicated wire)
	Product weight	About 0.5KG
Maximum power consumption	22W	

VGA output card

EMAX-OUT VGA4



Features

- 4 DB15 female interface outputs, 4 3.5mm audio input interface;
- Can choose any signal output from VGA, CVBS, or YPbPr;
- Supports hot swapping and simultaneous switching of audio and video signals;
- Support analog audio output;
- Maximum supported resolution:
HDPC: 1920x1200P@60Hz ;
HDTV: 1920x1080P@60Hz .

Specifications

Parameter Name	EMAX-OUT VGA4			
Interface	4x DB15 interface, 4x 3.5mm audio interface			
Video	Signal type	CVBS	YPbPr	VGA
	Gain	0dB	0dB	0dB
	Bandwidth	150MHz@-3dB	350MHz@-3dB	380MHz
	Differential phase error	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	—
	Signal strength	1Vpp: CVBS	1Vpp: (Y in YPbPr) 0.3Vpp: (PbPr/CbCr in YPbPr)	0.63Vpp to 0.9Vpp
	Min/Max level	Analog signal: -2V/+2V	Analog signal: -2V/+2V	RGB signal: 0V/1.0V HV signal: 0V/5.0V
	Impedance	75 Ω	75 Ω	75 Ω
	Returnloss	<-30dB@5MHz	<-30dB@5MHz	<-30dB@5MHz
	Product weight	About 0.5KG		
	Maximum power consumption	20W		

SDI output card

EMAX-OUT SDI4



Features

- 4 BNC female interface seamless output, 4 BNC female interface looped out;
- Supports hot swapping;
- Support SD-SDI/HD-SDI/3G SDI signal output.

Specifications

Parameter Name	EMAX-OUT SDI4	
Interface	4x BNC input, 4x BNC loop out	
Video	Supported protocol	SMPTE 425M, SMPTE 424M, SMPTE 292M, SMPTE 259M-C, DVB-ASI
	Interface bandwidth	2.970Gb/s, 1.485Gb/s, 270Mb/s
	Supported resolution	1920x1080@25, 1920x1080P@30, 1280x720@60, 1280x720@50, 1920x1080P@60, 1920x1080i@50, 1920x1080i@60;
	Supported format	SD-SDI/HD-SDI/3G-SDI
Product weight	About 0.5KG	
Maximum power consumption	20W	

DP output card

EMAX-OUT DP4



Features

- 4 DP interface, 4 3.5mm audio interface;
- Supports hot swapping and simultaneous switching of audio and video signals;
- Support analog audio and DP embedded audio selection input;
- Support the EDID reading function;
- Compatible with DP1.1 standards;
- Maximum supported resolution:
HDCP: 1920x1200P@60Hz ,
HDTV: 1920x1080P@60Hz .

Specifications

Parameter Name	EMAX-OUT DP4	
Protocol	DP 1.1 protocol;	
Video	Gain	0 dB
	Pixel bandwidth	165MHz, full digital
	Interface bandwidth	2.25Gbps, full digital (total 6.75Gbps, each color is 2.25Gbps)
	Supported resolution	800x600@60, 1024x768@60, 1280x720@60, 1280x768@60, 1280x800@60, 1280x960@60, 1280x1024@60, 1360x768@60, 1366x768@60, 1440x900@60, 1600x900@60, 1600x1200@60, 1920x1080i@50, 1920x1080i@60, 1920x1080P@60, 1920x1200P@60;
	Clock jitter	<0.15 Tbit
	Bit rise time	<0.3Tbit (20%--80%)
	Bit descent time	<0.3Tbit (20%--80%)
	Maximum transmission delay	5nS(±1nS)
	Interface	4x DP interface, 4x 3.5mm audio interface
	Signal strength	T.M.D.S. +/- 0.4Vpp
	Min/Max level	T.M.D.S. 2.9V/3.3V
	Impedance	50 Ω
	EDID	N/A
	Maximum DC bias error	15mV
	Suggested maximum input/output distance	Maximum output of 7 meters, within 1600x1200@60 When (it is recommended to use certified DP dedicated wire, such as Molex TM wire)
	Product weight	About 0.5KG
	Maximum power consumption	15W

IP output card

EMAX-OUT IP4



Features

- 1 High speed RJ45 interface;
 - Using CAT5e/6 wire to output a maximum distance of 100m;
 - Support web login to set network protocols, local network parameters, etc;
 - Support receiving fixed IP address videos or automatically searching for encoding devices on the network;
 - Support network protocols such as RTP, RTSP, RTCP, TCP, UDP, etc;
 - Support ADPCM audio encoding;
 - Support mainstream cameras such as Hikvision, Dahua, and Huawei;
- Maximum supported resolution: 1920x1080P@60 .

Specifications

Parameter Name	EMAX-IN IP4	
Network protocol	RTP, RTSP, RTCP, TCP, UDP, etc.	
Video	Network interface bandwidth	1000M
	Video compression	H.264 MainProfile/H.264 Baseline Profile /H.264 HighProfile
	Audio compression	ADPCM
	Maximum transmission delay	100ms (depending on encoding delay and network transmission delay)
	Bit descent time	<0.3Tbit (20%--80%)
	Suggested maximum input/output distance	100m
	Maximum supported resolution	1920x1080P@60
Product weight	About 0.5KG	
Maximum power consumption	25W	

4K HDMI output card

EMAX-OUT HDMI2



Features

- 2 HDMI-A interface, 2 3.5mm audio interface;
- Output up to a maximum distance of 7M;
- Supports hot swapping and simultaneous switching of audio and video signals;
- Support analog audio and HDMI embedded audio selection output;
- Support EDID reading function;
- Compatible with HDMI1.4a standards, HDCP1.4 protocol, DVI1.0 protocol;
- Maximum supported resolution:
- HDCP: 3840x2160P@30 .

Specifications

Parameter Name	EMAX-IN HDMI2	
Protocol	HDMI1.4a standard, HDCP1.4 protocol, DVI1.0 protocol	
Gain	0 dB	
Pixel bandwidth	165MHz, full digital	
Interface bandwidth	4.5Gbps, full digital (total 6.75Gbps, each color is 2.25Gbps)	
Supported resolution	800x600@60, 1024x768@60, 1280x720@60, 1280x768@60, 1280x800@60, 1280x960@60, 1280x1024@60, 1360x768@60, 1366x768@60, 1440x900@60, 1600x900@60, 1600x1200@60, 1920x1080@25, 1920x1080P@30, 1920x1080P@60, 1920x1200P@60, 1920x1080i@50, 1920x1080i@60; 3840x2160@30	
Clock jitter	<0.15 Tbit	
Bit rise time	<0.3Tbit (20%--80%)	
Bit descent time	<0.3Tbit (20%--80%)	
Maximum transmission delay	5nS(±1nS)	
Interface	2x HDMI-A interface 2x 3.5mm audio interface	
Signal strength	T.M.D.S. +/- 0.4Vpp	
Min/Max level	T.M.D.S. 2.9V/3.3V	
Impedance	50 Ω	
EDID	Optional default EDID and read function	
Maximum DC bias error	15mV	
Suggested maximum input/output distance	Output less than 7 meters, within 1600x1200@60hz (it is recommended to use certified HDMI dedicated wires, such as Molex TM wires)	
Product weight	About 0.5KG	
Maximum power consumption	15W	

4K fiber output card

EMAX-OUT SF2



Features

- 2 single core fiber output;
- Support hot swapping;
- Equipped with a fiber optic transmitter, it can achieve a maximum input signal transmission of 20Km (single mode);
- Maximum supported resolution: 3840x2160P@30 .

Specifications

Parameter Name	EMAX-OUT SF2	
Interface	2x high-speed single core LC fiber optic interface	
Video	Optical interface	LC connector
	Optical type	Multimode/Single Mode(optional)
	Wavelength	Multimode 850nm/Single Mode: 1310nm-1620nm(optional)
	Interface bandwidth	Forward: 6.25Gbps, Reverse: 3.125Gbps
	Clock jitter	<0.15 Tbit
	Bit rise time	<0.3Tbit (20%--80%)
	Bit descent time	<0.3Tbit (20%--80%)
	Suggested maximum output distance	Single mode fiber: 2-20 kilometers
	Maximum resolution	3840x2160P@30Hz
	Product weight	About 0.5KG
Maximum power consumption	20W	

HDMI output card

EMAX-OUT HDMI4



Features

- 4 HDMI-A interface seamless output, 4 3.5mm audio interface;
- Output up to a maximum distance of 7M;
- Supports hot swapping and simultaneous switching of audio and video signals;
- Support simultaneous output of analog audio and HDMI embedded audio; Support EDID reading function;
- Compatible with HDMI1.3a standards, HDCP1.3 protocol, DVI1.0 protocol;
- Maximum supported resolution:
 - HDPC: 1920x1200P@60 ;
 - HDTV: 1920x1080P@60 .

Specifications

Parameter Name	EMAX-OUT HDMI4		
Protocol	HDMI1.3a standard, HDCP1.3 protocol, DVI1.0 protocol		
Video	Gain	0 dB	
	Pixel bandwidth	165MHz, full digital	
	Interface bandwidth	2.25Gbps, full digital (total 6.75Gbps, each color is 2.25Gbps)	
	Supported resolution	800x600@60, 1024x768@60, 1280x768@60, 1280x800@60, 1280x960@60, 1280x1024@60, 1360x768@60, 1366x768@60, 1440x900@60, 1600x900@60, 1600x1200@60, 1920x1080@25, 1920x1080P@30, 1920x1080P@60, 1920x1200P@60, 1920x1080i@50, 1920x1080i@60, 1280x720@60;	
	Clock jitter	<0.15 Tbit	
	Bit rise time	<0.3Tbit (20%--80%)	
	Bit descent time	<0.3Tbit (20%--80%)	
	Maximum transmission delay	5nS(±1nS)	
	Interface	4x HDMI-A interface 4x 3.5mm audio interface	
	Signal strength	T.M.D.S. +/- 0.4Vpp	
	Min/Max level	T.M.D.S. 2.9V/3.3V	
	Impedance	50 Ω	
	EDID	N/A	
	Maximum DC bias error	15mV	
	Suggested maximum input/output distance	Output less than 7 meters, within 1600x1200@60hz (it is recommended to use certified HDMI dedicated wires, such as Molex TM wires)	
	Product weight	About 0.5KG	
	Maximum power consumption	15W	

Fiber video wall card

EMAX-PJOUT SF4



Features

- 4 single core fiber output;
- With splicing function;
- Support hot swapping;
- Equipped with a fiber optic transmitter, it can achieve a maximum input signal transmission of 20Km (single mode);
- Supports 4-channel single core fiber splicing output with maximum resolution support 1920x1200@60Hz It can achieve a maximum input signal transmission of 20Km (single mode);
- A single screen can open 4 windows, with signals that can be stacked, roamed, and scaled at will.

Specifications

Parameter Name	EMAX-PJOUT SF4	
Interface	4x high-speed single core LC fiber optic interface	
Video	Optical interface	LC connector
	Optical type	Multimode/Single Mode(optional)
	Wavelength	Multimode: 850nm/Single Mode: 1310nm-1620nm(optional)
	Interface bandwidth	Forward: 6.25Gbps, Reverse: 3.125Gbps
	Clock jitter	<0.15 Tbit
	Bit rise time	<0.3Tbit (20%--80%)
	Bit descent time	<0.3Tbit (20%--80%)
	Suggested maximum output distance	Single mode fiber: 2-20 kilometers, 1920x1080p@60
	Maximum resolution	HDPC: 1920x1200P@60Hz HDTV: 1920x1080P@60Hz
	Product weight	About 0.5KG
Maximum power consumption	20W	

HDBaseT video wall card

EMAX-PJOUT HD2



Features

- 2 high-speed RJ45 interface output;
 - With splicing function;
 - Using CAT5e/6 wire to output a maximum distance of 100m;
 - Support hot swapping;
 - Compatible with HDBaseT protocol;
 - Support external POC power supply and requires optional POC power supply. Models above 3636 support this Function;
 - Support 2-channel twisted pair splicing output;
- A single screen can open 8 windows, with signals that can be stacked, roamed, and scaled at will.

Specifications

Parameter Name	EMAX-PJOUT HD2	
Interface	2x high-speed RJ45 interface	
Video	Protocol	HDBaseT protocol
	Pixel bandwidth	165MHz, full digital
	Interface bandwidth	4.5Gbps, full digital (total 6.75Gbps, each color is 2.25Gbps)
	Maximum resolution	HDPC: 1920x1080P@60Hz
	Signal type	High speed differential signal defined in HDBaseT protocol
	POC	With POC power supply (+48V), POC power supply needs to be used in conjunction with our company's CAT5 series transmitters. The input port of this card can provide power to it through a network cable. Note: This card cannot be connected to a sending device with POC power supply.
	Impedance	50 Ω
	EDID	N/A
	Max DC bias error	15mV
	Suggested maximum input/output distance	Maximum of 100 meters, within 1600x1200@60hz (Recommend using NEXANS CAT5e/6 dedicated wire)
Product weight	About 0.5KG	
Maximum power consumption	22W	

Fiber video wall card

EMAX-PJOUT SF2



Features

- 2 single core fiber output;
- With splicing function;
- Support hot swapping;
- Equipped with a fiber optic transmitter, it can achieve a maximum input signal transmission of 20Km (single mode);
- Supports 2-channel single core fiber splicing output with maximum resolution support 1920x1200P@60Hz It can achieve a maximum output signal transmission of 20Km (single mode);
- A single screen can open 8 windows, with signals that can be stacked, roamed, and scaled at will.

Specifications

Parameter Name	EMAX-PJOUT SF2	
Interface	2x high-speed single core LC fiber optic interface	
Video	Optical interface	LC connector
	Optical type	Multimode/Single Mode(optional)
	Wavelength	Multimode 850nm/Single Mode: 1310nm-1620nm(optional)
	Interface bandwidth	Forward: 6.25Gbps, Reverse: 3.125Gbps
	Clock jitter	<0.15 Tbit
	Bit rise time	<0.3Tbit (20%--80%)
	Bit descent time	<0.3Tbit (20%--80%)
	Suggested maximum output distance	Single mode fiber: 2-20 kilometers, 1920x1080p@60
	Maximum resolution	HDPC:1920x1200P@60Hz
Product weight	About 0.5KG	
Maximum power consumption	20W	

DVI video wall card

EMAX-PJOUT DVI2



Features

- Supports 2 DVI-D female interface outputs;
- With splicing function;
- Output up to a maximum distance of 7m;
- Support hot swapping;
- Support EDID reading function;
- Supports 2-channel DVI splicing output with maximum resolution support 1920x1200@60Hz ;
- A single screen can open 8 windows, with signals that can be stacked, roamed, and scaled at will.

Specifications

Parameter Name	EMAX-PJOUT DVI2	
Protocol	DVI1.0 protocol	
Video	Gain	0 dB
	Pixel bandwidth	165MHz, full digital
	Interface bandwidth	4.5Gbps, full digital (total 6.75Gbps, each color is 2.25Gbps)
	Maximum supported resolution	HDPC:1920x1200P@60Hz
	Clock jitter	<0.15 Tbit
	Bit rise time	<0.3Tbit (20%--80%)
	Bit descent time	<0.3Tbit (20%--80%)
	Maximum transmission delay	5nS(±1nS)
	Interface	2x DVI-D interface
	Signal strength	T.M.D.S. +/- 0.4Vpp
	Min/Max level	T.M.D.S. 2.9V/3.3V
	Impedance	50 Ω
	EDID	N/A
	Maximum DC bias error	15mV
	Suggested maximum input/output distance	Input less than 7 meters, within 1600x1200@60hz (it is recommended to use certified DVI dedicated wires, such as Molex TM wires)
	Product weight	About 0.5KG
Maximum power consumption	15W	

DVI output card

EMAX-OUT DVI4



Features

- Support seamless output with 4 DVI-I interfaces and 4 3.5mm audio interface;
- Output up to a maximum distance of 7M;
- Supports hot swapping and simultaneous switching of audio and video signals; Support analog audio output;
- Support EDID reading function; Support DVI and VGA selection output;
- DVI output is compatible with DV11.0 protocol;
- Maximum supported resolution:
 - HDPC: 1920x1200P@60
 - HDTV: 1920x1080P@60 .

Specifications

Parameter Name	EMAX-OUT DVI4
Protocol	DVI1.0 protocol
Gain	0 dB
Pixel bandwidth	165MHz, full digital or analog(optional)
Interface bandwidth	2.25Gbps, full digital (total 6.75Gbps, each color is 2.25Gbps) or analog 350MHz
Supported resolution	800x600@60, 1024x768@60, 1280x720@60, 1280x768@60, 1280x800@60, 1280x960@60, 1280x1024@60, 1360x768@60, 1366x768@60, 1440x900@60, 1600x900@60, 1600x1200@60, 1920x1080P@60, 1920x1200P@60, 1920x1080i@50, 1920x1080i@60;
Clock jitter	<0.15 Tbit
Bit rise time	<0.3Tbit (20%--80%)
Bit descent time	<0.3Tbit (20%--80%)
Maximum transmission delay	5nS(±1nS)
Interface	4x DVI-I female interface 4x 3.5mm audio interface
Signal strength	T.M.D.S. +/- 0.4Vpp
Min/Max level	T.M.D.S. 2.9V/3.3V
Impedance	50 Ω
EDID	N/A
Maximum DC bias error	15mV
Suggested maximum input/output distance	Less than 7 meters, within 1600x1200@60hz (it is recommended to use certified DVI dedicated wires, such as Molex TM wires)
Product weight	About 0.5KG
Maximum power consumption	15W

4K HDBaseT output card

EMAX-OUT HD2



Features

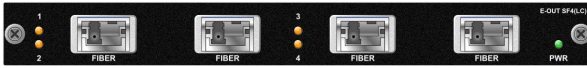
- 2 high-speed RJ45 interface, 2 3PIN Phoenix interface; Using CAT5e/6 wire to output a maximum distance of 100m;
- Supports hot swapping and simultaneous switching of audio and video signals;
- Support serial port output, optional IO switching card, which can achieve serial port switching;
- Compatible with HDBaseT protocol;
- Maximum supported resolution:
 - HDPC: 3840x2160P@30 .

Specifications

Parameter Name	EMAX-OUT HD2
Interface	2x high-speed RJ45 interface, 2x 3PIN Phoenix interface
Protocol	HDBaseT protocol
Pixel bandwidth	165MHz, full digital
Interface bandwidth	4.5Gbps, full digital (total 6.75Gbps, each color is 2.25Gbps)
Maximum resolution	3840x2160P@30Hz
Signal type	High speed differential signal defined in HDBaseT protocol
POC	With POC power supply (+48V), POC power supply needs to be used in conjunction with our company's CAT5 series transmitters. The input port of this card can provide power to it through a network cable. Note: This card cannot be connected to a sending device with POC power supply.
Impedance	50 Ω
EDID	N/A
Max DC bias error	15mV
Suggested maximum input/output distance	Maximum of 100 meters, within 1600x1200@60hz (Recommend using NEXANS CAT5e/6 dedicated wire)
Product weight	About 0.5KG
Maximum power consumption	27W

Fiber output card

EMAX-OUT SF4



Features

- 4 single core single mode fiber seamless output, LC interface;
- Support hot swapping;
- Equipped with a fiber optic transmitter, it can achieve output signal transmission of 20 kilometers;
- Maximum supported resolution for output:
HDPC: 1920x1200P@60 ;
HDTV: 1920x1080P@60 .

Specifications

Parameter Name	EMAX-OUT SF4	
Interface	4x high-speed single core single-mode LC fiber optic interface	
Video	Optical interface	LC connector
	Optical type	Single Mode
	Wavelength	1310nm-1620nm
	Interface bandwidth	Forward: 10.2Gbps, Reverse: 250Mbps
	Clock jitter	<0.15 Tbit
	Bit rise time	<0.3Tbit (20%--80%)
	Bit descent time	<0.3Tbit (20%--80%)
	Suggested maximum output distance	Single mode fiber: 2-20 kilometers, 1920x1080p@60
	Supported resolution	800x600@60,1024x768@60, 1280x720@60, 1280x768@60, 1280x800@60, 1280x960@60, 1280x1024@60, 1360x768@60, 1366x768@60, 1440x900@60, 1600x900@60, 1600x1200@60, 1920x1080P@60, 1920X1200P@60, 1920x1080i@50, 1920X1080i@60;
	Product weight	About 0.5KG
Maximum power consumption	20W	

HDBaseT video wall card

EMAX-PJOUT HD4



Features

- 4 high-speed RJ45 interface output;
- With video wall function;
Using CAT5e/6 wire to output a maximum distance of 100m;
- Support hot swapping; Compatible with HDBaseT protocol;
- Supports 4-channel twisted pair splicing output with maximum resolution support 1920x1200@60Hz Used in conjunction with CR-UCAT5 HDMI 4KR, it can achieve 100m transmission of output signals (with optional POC power supply, it can achieve remote power supply to the transmission box);
- A single screen can open 4 windows, with signals that can be stacked, roamed, and scaled at will.

Specifications

Parameter Name	EMAX-OUT HD4	
Interface	4x high-speed RJ45 interface	
Video	Protocol	HDBaseT protocol
	Pixel bandwidth	165MHz, full digital
	Interface bandwidth	2.25Gbps, full digital (total 6.75Gbps, each color is 2.25Gbps)
	Maximum resolution	HDPC: 1920x1200P@60Hz HDTV: 1920x1080P@60Hz
	Signal type	High speed differential signal defined in HDBaseT protocol
	POC	With POC power supply (+48V), POC power supply needs to be used in conjunction with our company's CAT5 series transmitters. The input port of this card can provide power to it through a network cable. Note: This card cannot be connected to a sending device with POC power supply.
	Impedance	50 Ω
	Max DC bias error	15mV
	Suggested maximum input/output distance	Maximum of 100 meters, within 1600x1200@60hz (Recommend using NEXANS CAT5e/6 dedicated wire)
	Product weight	About 0.5KG
Maximum power consumption	22W	

DVI video wall card

EMAX-PJOUT DVI4



Features

- Support 4 DVI-D female interface outputs;
- With splicing function;
- Output up to a maximum distance of 7M;
- Support hot swapping;
- Support EDID reading function;
- Supports 4-channel DVI splicing output with maximum resolution support 1920x1200@60Hz ;
- A single screen can open 4 windows, with signals that can be stacked, roamed, and scaled at will.

Specifications

Parameter Name		EMAX-PJOUT DVI4
Video	Protocol	DVI1.0 protocol
	Gain	0 dB
	Pixel bandwidth	165MHz, full digital
	Interface bandwidth	2.25Gbps, full digital (total 6.75Gbps, each color is 2.25Gbps)
	Supported resolution	800x600@60, 1024x768@60, 1280x720@60, 1280x768@60, 1280x800@60, 1280x960@60, 1280x1024@60, 1360x768@60, 1366x768@60, 1600x900@60, 1600x1200@60, 1920x1080P@60, 1920X1200P@60
	Clock jitter	<0.15 Tbit
	Bit rise time	<0.3Tbit (20%--80%)
	Bit descent time	<0.3Tbit (20%--80%)
	Maximum transmission delay	5nS(±1nS)
	Interface	4x DVI-D female interface
	Signal strength	T.M.D.S. +/- 0.4Vpp
	Min/Max level	T.M.D.S. 2.9V/3.3V
	Impedance	50 Ω
	EDID	N/A
	Maximum DC bias error	15mV
	Suggested maximum input/output distance	Less than 7 meters, within 1600x1200@60hz (it is recommended to use certified DVI dedicated wires, such as Molex TM wires)
	Product weight	About 0.5KG
	Maximum power consumption	15W

HDMI video wall card

EMAX-PJOUT HDMI4



Features

- Equipped with one card 4 HDMI output interface;
- With splicing function;
- Output up to a maximum distance of 7M;
- Support hot swapping of board cards;
- Supports LED irregular non-standard resolution splicing output, with a maximum resolution of 1920* 1080@60 for single screen output, backward compatible with all resolutions;
- Single screen windowable 4-layer 1920* 1080@60 It supports splicing functions such as large screen signal stacking, roaming, zooming, stretching, switching, and multi screen segmentation.

Specifications

Parameter Name		EMAX-PJOUT HDMI4
Video	Protocol	HDMI1.3a standard, HDCP1.3 protocol, DVI1.0 protocol
	Gain	0 dB
	Pixel bandwidth	165MHz, full digital
	Interface bandwidth	2.25Gbps, full digital (total 6.75Gbps, each color is 2.25Gbps)
	Supported resolution	800x600@60, 1024x768@60, 1280x720@60, 1280x768@60, 1280x800@60, 1280x960@60, 1280x1024@60, 1360x768@60, 1366x768@60, 1600x900@60, 1600x1200@60, 1920x1080P@60
	Clock jitter	<0.15 Tbit
	Bit rise time	<0.3Tbit (20%--80%)
	Bit descent time	<0.3Tbit (20%--80%)
	Maximum transmission delay	5nS(±1nS)
	Interface	4x HDMI-A interface
	Signal strength	T.M.D.S. +/- 0.4Vpp
	Min/Max level	T.M.D.S. 2.9V/3.3V
	Impedance	50 Ω
	EDID	N/A
	Maximum DC bias error	15mV
	Suggested maximum input/output distance	Output less than 7 meters, within 1600x1200@60hz (it is recommended to use certified HDMI dedicated wires, such as Molex TM wires)
	Product weight	About 0.5KG
	Maximum power consumption	15W

HDMI video wall card

EMAX-PJOUT HDMI2



Features

- Equipped with one card 2 HDMI output interface;
- With splicing function;
- Output up to a maximum distance of 7M;
- Support hot swapping of board cards;
- Supports LED irregular non-standard resolution splicing output, with a maximum resolution of 1920*1080@60 for single screen output , backward compatible with all resolutions;
- Single screen support 8 layers of 1920* 1080@60. It supports splicing functions such as large screen signal stacking, roaming, zooming, stretching, switching, and multi screen segmentation.

Specifications

Parameter Name	EMAX-PJOUT HDMI2
Protocol	HDMI1.3a standard, HDCP1.3 protocol, DVI1.0 protocol
Gain	0 dB
Pixel bandwidth	165MHz, full digital
Interface bandwidth	2.25Gbps, full digital (total 6.75Gbps, each color is 2.25Gbps)
Supported resolution	800x600@60, 1024x768@60, 1280x720@60, 1280x768@60, 1280x800@60, 1280x960@60, 1280x1024@60, 1360x768@60, 1366x768@60, 1600x900@60, 1600x1200@60, 1920x1080P@60
Clock jitter	<0.15 Tbit
Bit rise time	<0.3Tbit (20%--80%)
Bit descent time	<0.3Tbit (20%--80%)
Video	
Maximum transmission delay	5nS(±1nS)
Interface	2x HDMI-A interface
Signal strength	T.M.D.S. +/- 0.4Vpp
Min/Max level	T.M.D.S. 2.9V/3.3V
Impedance	50 Ω
EDID	N/A
Maximum DC bias error	15mV
Suggested maximum input/output distance	Output less than 7 meters, within 1600x1200@60hz (it is recommended to use certified HDMI dedicated wires, such as Molex TM wires)
Product weight	About 0.5KG
Maximum power consumption	15W

4K60 fiber output card

EUHD-OUT ZSF4



Features

- 4 single core fiber seamless output;
 - Support hot swapping;
- Equipped with fiber optic transmitters, it can achieve output signal transmission up to 1 kilometer;
- With signal transmission indicator light;
 - Input maximum supported resolution: Maximum supported resolution: 3840*2160P@60 .

Specifications

Parameter Name	EUHD-OUT ZSF4	
Interface	4x high-speed single core LC fiber optic interface	
Video	Optical interface	LC connector
	Optical type	Single Mode
	Wavelength	Single Mode: 1310nm-1620nm(optional)
	Interface bandwidth	Forward: 6.25Gbps, Reverse: 3.125Gbps
	Clock jitter	<0.15 Tbit
	Bit rise time	<0.3Tbit (20%--80%)
	Bit descent time	<0.3Tbit (20%--80%)
	Suggested maximum input distance	Single mode fiber: 2-20 kilometers
	Maximum resolution	3840x2160P@30Hz
	Product weight	About 0.5KG
Maximum power consumption	20W	

Control card

EMAX-CON



Features

- Database management, where all information is stored on the device;
- Support a maximum of 512 contingency plans;
- Multi point control, synchronization of multiple client device states;
- 2 DB9 fully functional serial ports, capable of controlling and receiving instructions from various peripherals, as well as forwarding data and controlling large screen switches;
- 1 RJ45 interface, which can be connected to PC software and web pages for controlling, querying, and other devices;
- 1*4P Phoenix head keyboard interface, which can be connected to an external keyboard to achieve control of the device;
- 1 RS-232 Phoenix head interface, used for debugging and can also achieve control and command reception of various peripherals;
- Support hot swapping;
- Support dual control card backup and automatic data backup; Equipped with hot standby power switch button.

Preview card

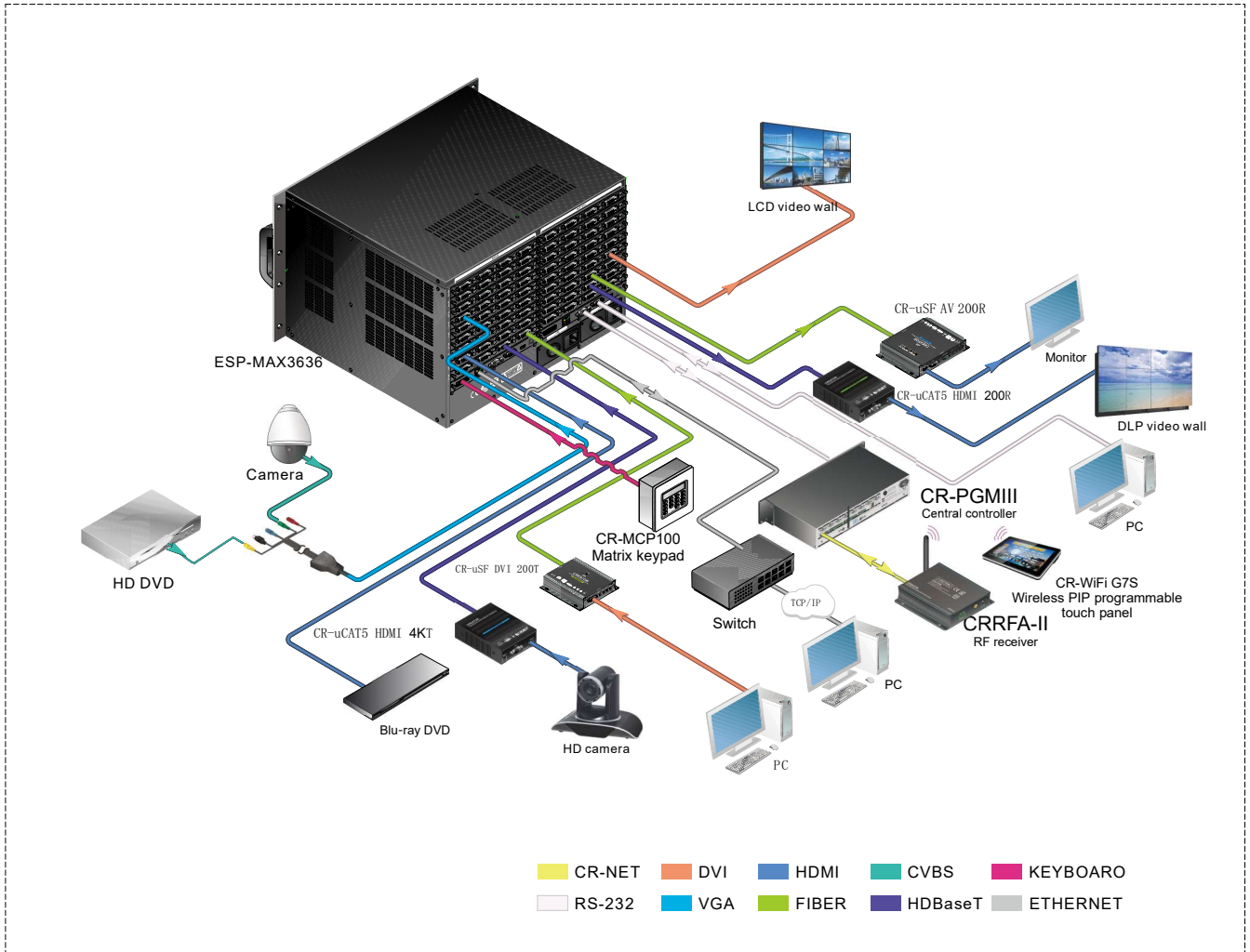
EMAX-PR LINK



Features

- 1 RJ45 interface preview output, which can simultaneously view 16 channels of video image information in groups or automatically rotate;
- 1 DVI interface preview+echo output, supporting 1, 4, 9, and 16 split screens;
- Each video supports resolution: 960x540@30fps ; 640x480@30fps ; 352x288@30fps ;
- Apply H.264&JPEG multi stream encoding, with frame rates supporting 1/16~60fps;
- Support hot swapping;
- Support controlling video switching through preview.

System diagram

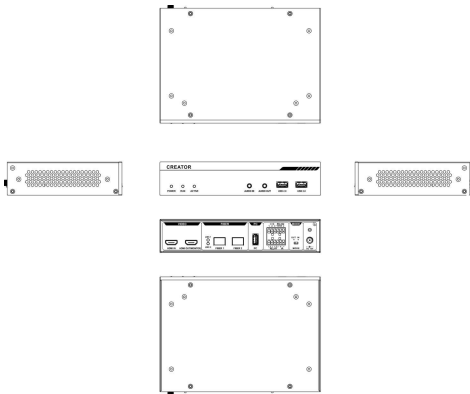


Non IP seat codec

CR-uSF HDMI Z600



CR-uSF HDMI Z600



Size(mm):
210(L)×150(W)×43.6(H)

Product Overview

The CR-uSF HDMI Z600 seat codec supports the transmission of audio, video, and control signals, using advanced fiber optic technology and supporting multiple mainstream resolutions, with a maximum support resolution of up to 3840x2160@60Hz .

It's widely used in advertising engineering, industrial automation control, medical equipment, security monitoring, multimedia teaching and other fields.

Features

- 1xHDMI input interface, supporting up to 4K* 2K@60 Video signal;
- 1xHDMI output interface, supporting up to 4K* 2K@60 Video signal;
- Support input node power-off loop out;
- 2xLC optical port, capable of dual optical backup;
- 1xPC interface, used to control the computer mouse and keyboard;
- 1x2x6P Phoenix interface, including 2x IO control interfaces, 1xRS-232 interfaces, 1x infrared emission interfaces, and 2x weak current relay interfaces;
- 2xUSB2.0, system update and upgrade, mouse and keyboard KVM control;
- 1x3.5 interface audio input;
- 1x3.5 interface audio output;
- DC12V power adapter power supply;
- 3xstatus display lights: power indicator light, operation indicator light, and action indicator light;
- Support the function of in-seat splicing (4 split screens);
- Support seat management functions: meet video switching, remote desktop operation, plan storage, and plan call;
- Support visual preview.

■ Specifications

Parameter Name	CR-uSF HDMI Z600
RAM	2GB
FLASH	256MB
OS	Linux
Video input	1x HDMI, 4K@60
Video output	1x HDMI, 4K@60
Audio input	1x stereo input
Audio output	1x stereo output
Fiber interface	2x LC fiber interface
USB 2.0	2
USB 3.0	1
RS-232 interface	1
Relay interface	2
Infrared interface	1
Digital I/O port	2
Power supply	DC12V 1.5A
Weight	About 0.7KG
Power dissipation	15W
Color	Dark gray