VISSONIC

Professional Audio Video Manufacturer

Signal Management

PRODUCT DATASHEET

VISSONIC ELECTRONICS LTD.

Think Solutions

X9 Series Ultra-High Bandwidth

Modular Seamless Switching Video Wall Processor

Features

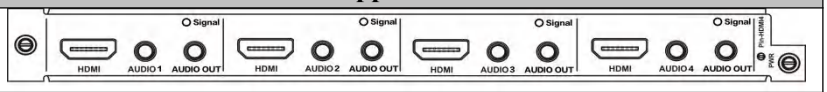
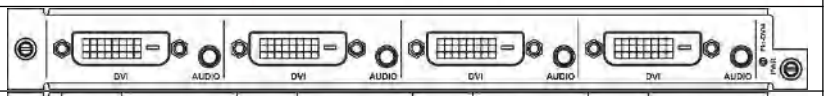
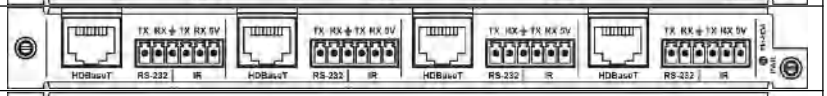
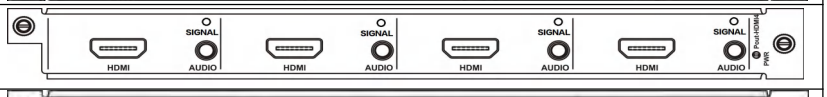
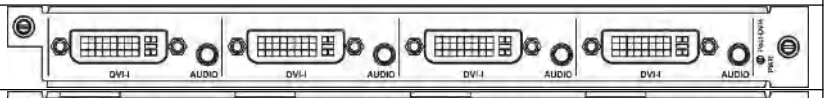
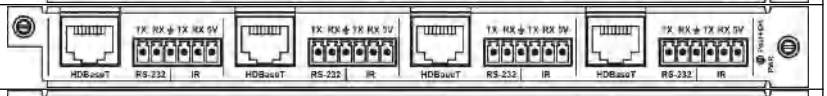
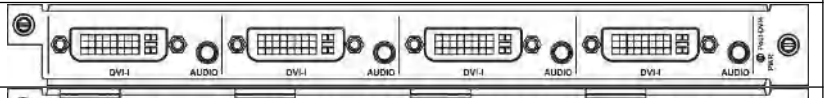
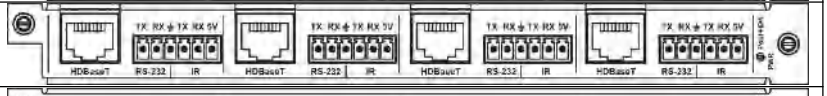
- The processor is based on hardware architecture
- The front panel has an LCD display and illuminated buttons to display and configure the device IP address.
- Modular design, flexibly configure input and output cards
- 2U / 3U / 7U / 12U / 24U / 48U Chassis size with mounting structure, from 8x8, 16x16, 36x36, 72x72, 144x144, 288x288 input / output channels respectively。
- **Audio and video switching splicing processor based on FPGA architecture**
- **Can convert between the following signals: DVI HD, Dual-Link DVI 4K, HDMI HD, HDMI 4K, VGA, Component, Composite, YC, SD-HDI, HD-SDI, 3G-SDI, HDBaseT HD and HDBaseT 4K, Full digital switching, each seamless output card can achieve real-time seamless switching.**
- Maximum resolution up to 4Kx2K @ 30Hz, backward compatible with all standard resolutions, and support non-standard resolution customization.
- Up to 288x 1080P input or 144x 4K UHD input.
- Up to 288x 1080P or 144x4K UHD seamless output.

- Redundant power supply is optional, will automatically take over without interrupting the operation of the controller
- Hot swapping of input boards and output boards without affecting the normal operation on systems.
- Real-time status monitoring of any module card temperature (input card, output card, control card), version, manufacturing information and fan speed.
- Automatic adjustment of cooling fan speed according to temperature changes.
- Automatic and manual backup configuration, export and import configuration file to control card.
- **Online firmware and Micro USB upgrade**
- EDID reading and EDID management
- Can simultaneously support seamless matrix pre-cutting / switching platform and LCD / LED / DLP video wall window splicing processing platform
- **Each splicing output card can realize the video splicing function, and the image window can be arbitrarily zoomed, overlap, cross-screen, roaming, background picture setting, partial interception and enlargement within the full screen**
- Configuration of preview card can realize video preview and switch on PC and tablet, and support real-time monitoring the content of the large screen.
- Comply with DVI 1.0 protocol, HDCP1.3 standard, HDMI 1.4a
- HDMI digital audio and analog audio selection input, HDMI digital audio and analog audio output simultaneously
- It has the characteristics of correction and compensation signals to reduce the error of video stream. DVI and HDMI input can reach 35 meters
- **200 sets of matrix pre-switching instructions and 200 sets of splicing plan instructions can be stored in the device, and can be switched with one key when called**
- The system contains a variety of test images such as red, green, blue, and white to facilitate quick debugging and system maintenance
- HDBaseT input and output signals support embedded (or local) bidirectional RS-232 and bidirectional IR signals, and can choose to switch with the video signal or separate switching mode, and support POC external power supply;
- Flexible control mode, with front panel LCD screen key control, infrared control, RS-232 control and RS-232 loop-out control, computer software control, web page control, RS-422 external panel control interface and panel lock function Through the serial port control of the remote HDBaseT, it is convenient for users to cooperate with various remote control devices
- **Using B / S architecture, the product itself supports mobile phone and tablet control, Android, IOS, Windows systems without installing any software and plug-ins without the need for external servers or central control;**
- Can adding text on input video, character color, size and position are optional

- The splicing output supports a single display / screen with 2 or 4 windows.
- **SDI input card has a loop-out function, HDMI input card has both de-embedding output and analog input, and IP board has access of the network surveillance dome camera, and can control PTZ, and each board can connect at least 400 pcs**
- Window can be lock, the size and position of the window will be fixed, and once locked it cannot be moved

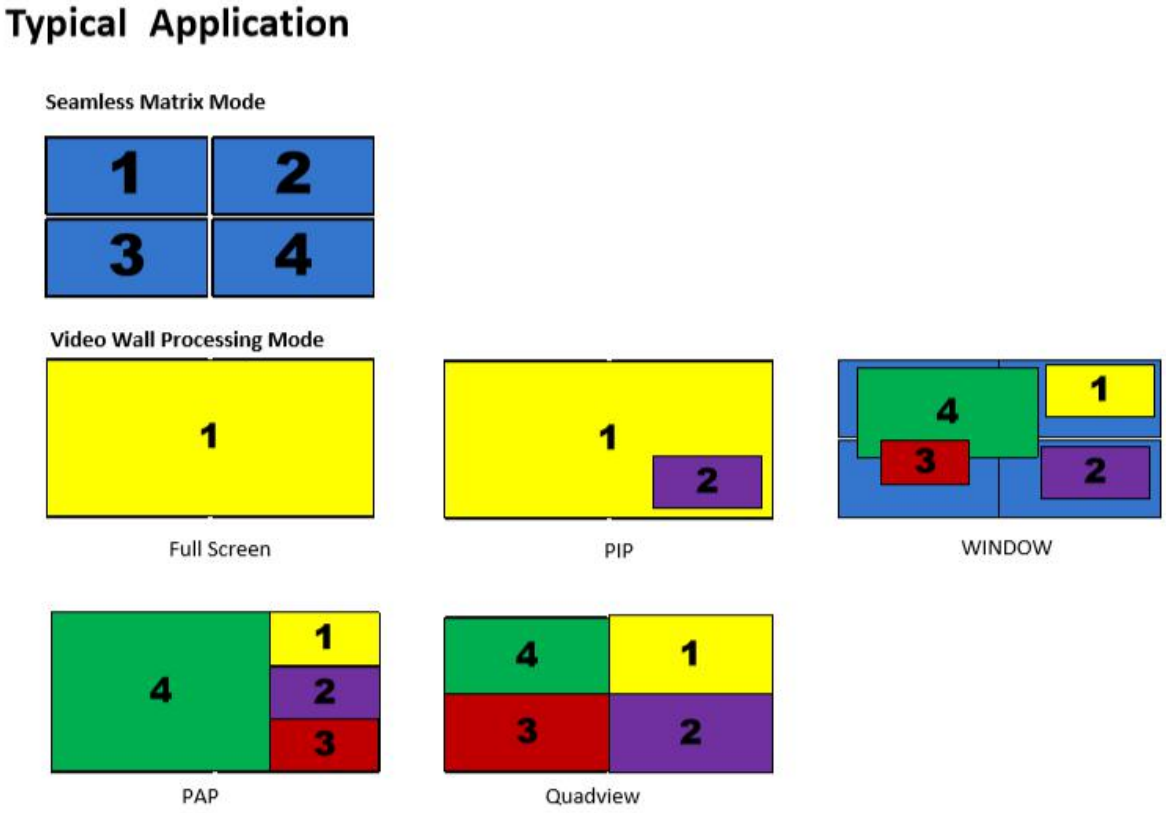
Manage more than 5 groups of display walls at the same time, each display wall can be a different display device, resolution or size. All display walls is real-time management.

Board

name/model	Appearance
VW-HM4I HDMI Input card	
VW-DV4I DVI Input card	
VW-HD4I HDBaseT Input card	
VW-VA4I VGA Input card	
VW-SDI4I SDI Input card	
VW-SF4I fiber Input card （single mode/multi-mode fiber）	
VW-HM4O HDMI seamless output card	
VW-DV4O DVI seamless output card	
VW-HD4O HDBaseT seamless output card	
VW-VA4O VGA seamless output card	
VW-SDI4O SDI seamless output card	
VW-SF4O fiber output card （single mode/multi-mode fiber）	
VP-HM4O HDMI seamless splicing output card	
VP-DV4O DVI seamless splicing output card	
VP-HD4O HDBaseT seamless splicing output card	
VP-SF4O fiber splicing output card	

VW-PVW preview card	
VW-Con Control card	

Typical Application



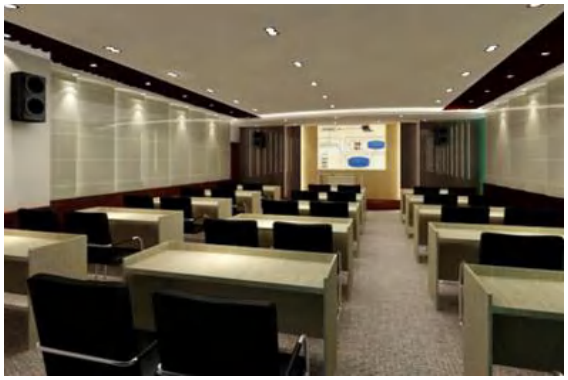
Seamless Switching

Normal Matrix

Output scalable resolution

Application cases:

Addressing Room



Training Room

Monitoring Room

Education

Video wall effect it can achieve:

Technical parameter

Model	VW-VM 0808	VW-VM 1616	VW-VM 3636	VW-VM 7272	VW-VM 144144	VW-VM 288288
Interface						
Number of input cards	2/8	4/16	9/36	18/72	36/144	72/288
Number of output cards	2/8	4/16	9/36	18/72	36/144	72/288
Input card type	VW-HM4I, VW-DV4I, VW-HD4I, VW-VA4I, VW-SDI4I, VW-IP2, VW-SF4I					
Seamless output card type	VW-HM4O, VW-DV4O, VW-HD4O, VW-VA4O, VW-SDI4O, VW-SF4O, VW-PVW					
Splicing output card type	VP-HM4O, VP-DV4O, VP-HD4O, VP-SF4O					
Bandwidth	13.5Gbps					
Serial control						
Serial control port structure	9-pin female D-type connector: 2 = TX, 3 = RX, 5 = GND; 9-pin male D-type connector: 2 = RX, 3 = TX, 5 = GN					
KEYBOARD Control interface						
Keyboard control interface	4-digit 3.8mm Phoenix interface					
Usage mode	Used with the expansion keyboard MCP100					
Keyboard control	+5V=DC5V, + = DATA+, -=DATA- GND = Signal ground					
Ethernet control						
Ethernet control interface	RJ-45 Female interface					
Ethernet Control Protocol	TCP/IP					
Ethernet control rate	Adaptive 10M / 100M, full duplex or half duplex					
Specification						
System working power	100VAC ~ 240VAC · 50/60 Hz · International adaptive power supply					
Storage, working temperature	0 ~ +50℃					
Storage, working humidity	20% ~ 70%					
Chassis size	2U	3U	7U	12U	24U	48U
Product weight (not included board)	5KG	7KG	16KG	29KG	80KG	250KG
No-load power consumption (not included board)	18W		30W		70W	300W

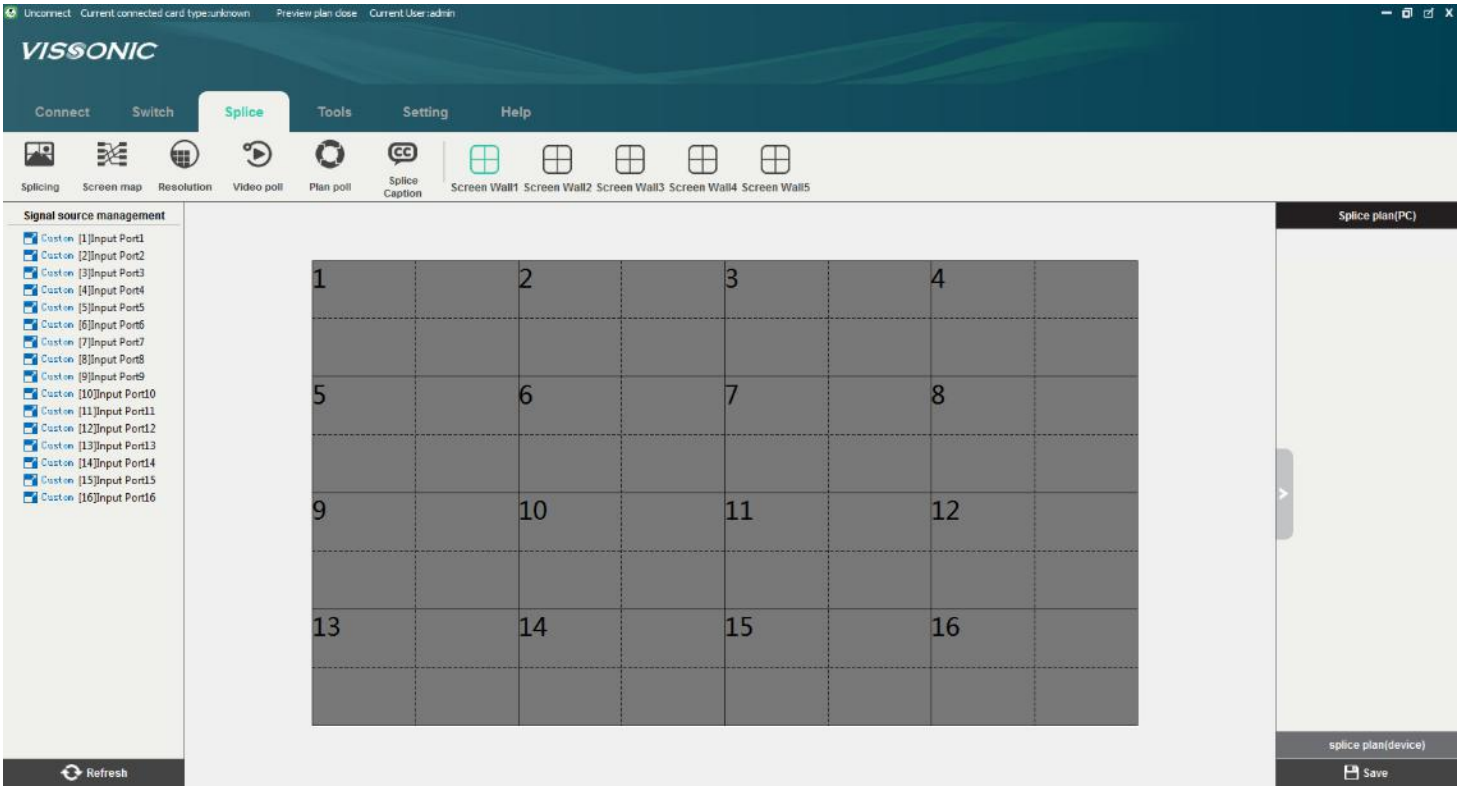
Size (L x W x H) mm	483x400x89	483x400x132	483x400x310	483x400x532	483x400x1043	
Failures time period	30,000 hours					
Warranty	3 years free warranty, lifetime maintenance					

VW-PVW Video preview card

Features:

- 1 channel RJ45 interface preview output, can view 4 channels of video image information at the same time;
- Each channel video resolution:
  1280x720@30fps；
  800x600@30fps；
  640x480@30fps；
  352x288@30fps；
- H.264 & JPEG multi-stream encoding is applied, and the frame rate supports 1/16 ~ 60fps;
- Support hot plugging;
- Video switching through preview control

VIS-X9SOFT Management Software



Features

- Matrix switching control with preview to switch function
- Video wall configuration function
- Real-time status monitoring of the temperature (input card, output card, control card), version, manufacturing information and fan speed etc.
- Maximum controlling 5 video walls simultaneously
- Support input video preview function (requires preview card)
- 200 splicing plans can be saved on the processor, 200 matrix switching plans can be recalled with one key on the software
- OSD text overlay function for subtitles and messaging
- User right management
- Drag and drop from input to output
- Open the window and draw the window size on the video wall

VW-HM4I HDMI INPUT CARD

Features

- 4 HDMI-A interfaces, 8x3.5mm audio sockets;
- The longest distance up to 35 meters;
- Hot swap, support audio and video signal switching together
- 3.5 analog audio and HDMI embedded audio selection input;
- Digital audio de-embedding can output to 3.5 audio socket
- EDID reading function
- Compatible with HDMI1.3a standard, HDCP1.3 protocol, DVI1.0 protocol;
- Maximum supported resolution:

HDPC：1920x1200P@60；
HDTV：1920x1080P@60

Technical parameter

Model	**VW-HM4I**
protocol	
HDMI1.3a standard, HDCP1.3 protocol, DVI1.0 protocol;	
video	
Gain	0dB
Pixel bandwidth	165MHz, full digital
Interface bandwidth	2.25Gbps, full digital (total 6.75Gbps, each color is 2.25Gbps)

Resolution	800x600@60,1024x768@60,1280x720@60,1280x768@60 · 1280x800 @60 · 1280x960@60 · 1280x1024@60,1360x768@60,1366x768@60,1 440x900@60,1600x900@60,1600x1200@60,1920x1080@25,1920x108 0P@30,1920x1080P@60,1920x1200P@60,1920x1080i@50,1920X1080 i@60;	
Clock Jitter	<0.15 Tbit	
Risetime	<0.3Tbit (20%--80%)	
Bit fall time (Falltime)	<0.3Tbit (20%--80%)	
Maximum transmission delay	5nS(±1nS)	
interface	4 HDMI-A ports, 4 3.5mm audio jacks	
Signal strength	T.M.D.S. +/- 0.4Vpp	
Min / Max level	T.M.D.S. 2.9V/3.3V	
impedance	50 Ω	
EDID	default EDID and read function (Optional ）	N/A
Maximum DC offset error	15mV	
	Input less than 35 meters, at 1600x1200 @ 60 (recommended to use certified HDMI Special wire, such as Molex TM wire)	
Recommended maximum	0.5KG	
product weight	15W	

VW-HM2I HDMI 4K INPUT CARD

Features:

- 2 HDMI-A interfaces, 4x3.5mm audio sockets;
- The longest distance up to 35 meters;
- Hot swap, support audio and video signal switching together
- 3.5 analog audio and HDMI embedded audio selection input;
- Digital audio de-embedding output to 3.5 audio socket
- EDID reading function
- Compatible with HDMI1.3a standard, HDCP1.3 protocol, DVI1.0 protocol;
- Maximum supported resolution:

Technical parameter

MODEL	**VW-HM2I**
protocol	
HDMI1.4 standard, HDCP1.3 protocol, DVI1.0 protocol;	
Video	
Gain	0dB
Pixel bandwidth	297MHz, full digital
Interface bandwidth	4.5Gbps full digital (13.5Gbps in total, 4.5Gbps for each color)
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；
Clock Jitter	<0.15 Tbit
Risetime	<0.3Tbit (20%--80%)
Bit fall time (Falltime)	<0.3Tbit (20%--80%)
Maximum transmission	5nS(±1nS)
interface	2 HDMI ports, 3.5mm audio jack
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 offset error	15mV
Recommended maximum input / output distance	Input less than 35 meters, at 1600x1200 @60 hours (recommended to use certified HDMI Special wire, such as Molex TM wire)
product weight	0.5KG
Maximum power	20W

VW-HD4I HDBaseT INPUT CARD

Features

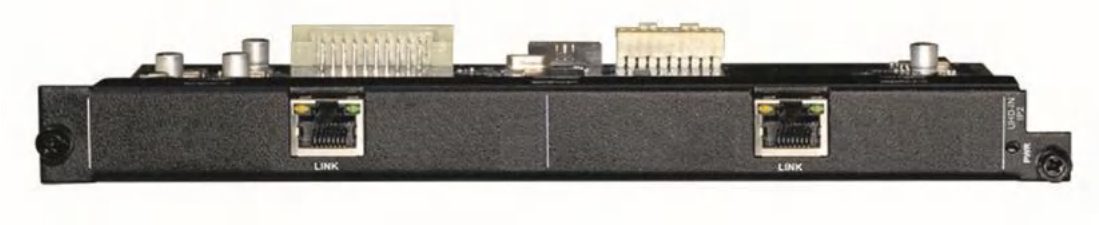
- 4 channel high-speed RJ45 interface seamless output, 4 channel 6PIN Phoenix socket interface;
- Using CAT5e / 6 cable output the longest distance up to 1080P @ 60HZ 100M;
- Hot swap of card, audio and video signal switching together;
- Infrared serial port output, optional IO switch card, can realize infrared serial port switch;
- Compatible with HDBaseT protocol；
- Maximum supported resolution：

HDPC：1920x1200P@60；
HDTV：1920x1080P@60

Technical parameter

MODEL	**VW-HD4I**
Link port input / output	
interface	4 channel high-speed RJ45 and 4 channel 6PIN Phoenix
Supported protocols	HDBaseT protocol
Pixel bandwidth	165MHz, full digital
Interface bandwidth	2.25Gbps, full digital (total 6.75Gbps, each color is 2.25Gbps)
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@60,1
signal type	High-speed differential signals defined in HDBaseT protocol
Network cable power supply	With POC power supply (+ 48V), for POC Powered by our company's CAT5 series transmitter, this card input port can provide power to it through the network cable
impedance	50 Ω
EDID	default EDIDN/A (Optional)
Maximum DC offset error	15mV
Recommended maximum input / output distance	Maximum 100 meters, at 1600x1200 @ 60 (recommended to use NEXANS CAT5e / 6 special wire)
product weight	0.5KG
Maximum power	27W

VW-IP2I IP Streaming INPUT CARD



Features

- 2 high-speed RJ45 ports；
- Use CAT5e / 6 cable to output the longest distance up to 100M;
- Support web login to set network protocol, local network parameters or remote network parameters and other parameters;
- Can receiving fixed IP address video, or automatically search for encoding devices on the network;
- Support onvif, RTP, RTSP, RTCP, TCP, UDP and other network protocols；
- Support G711a, G711u, G726 and ADPCM audio encoding;
- Support Mainstream cameras such as HIKVISION, Dahua and Huawei;
- Maximum supported resolution：1920x1080P@60Hz。

Technical parameter

MODEL	**VW-IP2I**
Network protocol	
Onvif · RTP · RTCP · RTSP · TCP · UDP	
video	
Network interface bandwidth	100M
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	100ms (depending on coding delay and network transmission delay)
IP parameters	Port1 default IP: 192.168.1.100 Port2 default IP: 192.168.2.100 Port3 default IP: 192.168.1.200 Port4 default IP: 192.168.2.200
Resolution and frame rate	1920×1080@60Hz,1920×1080@30Hz,1920x1080@25Hz,1280×720@60Hz,1280x1024@60Hz,1280x960@60Hz,704x576@60Hz,704x576@30Hz,704x576@25Hz,704x480@60Hz,704x480@30Hz,704x480@25Hz,352x288@60Hz,352x288@30Hz,352x288@25Hz；
Recommended maximum input distance	100M
product weight	0.5KG
Maximum power	25W

VW-VA4I VGA INPUT CARD

Features

- 4 channel DB15 female interface input, 3.5mm audio socket
- Support any VGA, CVBS, YPbPr signal input, can automatically identify the input signal source
- Hot swap of card, audio and video signal switching together
- Analog audio input
- Maximum supported resolution: HDPC: 1920x1200P @ 60; HDTV: 1920x1080P @ 60

Technical parameter

MODEL		**VW-VA4I**		
interface		DB15 interface, 3.5mm audio jack		
Resolution	Composite video CV	Input card: 480i / NTSC, 576i / PAL Output card: 480i / NTSC, 576i / PAL		
	Component video YPbPr	Input card: 480i / NTSC, 480P / NTSC, 576i / PAL, 576P / PAL, 1280x720 @ 50, 1280x720 @ 60,1920x1080i @ 50,1920X1080P @ 60; Output card: 1280x720 @ 60, 1920X1080P @ 60;		
	VGA video	Input card: 800x600 @ 60, 1024x768 @ 60, 1280x720 @ 60, 1280x768 @ 60, 1280x8 00 @ 60,1280x960 @ 60,1280x1024 @ 60,1360x768 @ 60,1360x1024 @ 60,13 66x768 @ 60, 1440x900 @ 60, 1400x1050 @ 60, 1600x900 @ 60, 1600x1200 @ 6 0,1680x1050 @ 60,1920X1080P @ 60; Output card: 800x600 @ 60, 1024x768 @ 60, 1280x720 @ 60, 1280x768 @ 60, 1280x8 00 @ 60,1280x960 @ 60,1280x1024 @ 60,1360x768 @ 60,1366x768 @ 60,144 0x900 @ 60,1600x900 @ 60,1600x1200 @ 60,1920x1080P @ 60,1920X1200P @ 60;		
Gain		0dB	0 dB	0 dB

bandwidth	150MHz @ -3dB	350MHz @ -3dB	380 MHz
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	1V p-p: composite video (CVBS)	1V p-p: (Component video In Y) 0.3Vp-p: (PbPr in component video / CbCr)	0.63V p-p to 0.9 V p-p
Min / Max level	Analog signal: -2V / + 2V	Analog signal: -2V / + 2V	RGB signal: 0V / 1.0V HV signal: 0V / 5. 0V
input resistance	75 Ω	75Ω	75Ω
Return loss	<-30dB@5MHz	<-30dB@5MHz	<-30dB@5MHz
product weight	0.5KG		
Maximum power	20W		

VW-SDI4I SDI INPUT CARD

Features

- 4 channel BNC female interface, 4 way BNC female interface ring out;
- Support hot plugging;
- HD / 3G SDI signal input
- Maximum supported resolution: HDPC: 1920x1200P @ 60; HDTV: 1920x1080P @ 60

Technical parameter

Model	**VW-SDI4I**
interface	4 channels BNC input, 4 channels BNC loop out

Supported protocols	SMPTE 425M, SMPTE 424M, SMPTE 292M, SMPTE 259M-C, DVB-ASI
Pixel bandwidth	2.970Gb/s · 1.485Gb/s · 270Mb/s ·
Resolution	1920x1080@25,1920x1080P@30,1280x720@60,1280x720@50,1920X1080 P@60,1920x1080i@50,1920X1080i@60;
Support format	HD-SDI 3G-SDI
product weight	0.5KG
Maximum power	20W

VW-DV4I DVI INPUT CARD

Features

- 4 channel DVI-D interface, 3.5mm audio socket
- The longest distance up to 35 meters;
- Hot swap, support audio and video signal switching together
- Analog audio and DVI video signal input
- EDID reading function
- Using DVI1.0 protocol
- Maximum supported resolution: HDPC: 1920x1200P @ 60; HDTV: 1920x1080P @ 60

Technical parameter

Model	**VW-DV4I**
protocol	
DVI1.0 protocol	
video	
Gain	0dB
Pixel bandwidth	165MHz, full digital 165MHz, full digital or analog(optional)
Interface bandwidth	2.25Gbps, full digital (total 6.75Gbp s, each color is 2.25Gbps)

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	
Risetime	<0.3Tbit (20%--80%)	
Bit fall time (Falltime)	<0.3Tbit (20%--80%)	
Maximum transmission delay	5nS(±1nS)	
interface	4 x DVI-D female interface, 4 x 3.5mm Audio seat	
Signal strength	T.M.D.S. +/- 0.4Vpp	
Min / Max level	T.M.D.S. 2.9V/3.3V	
impedance	50 Ω	
EDID	default EDID and read function (Optional)	N/A
Maximum DC offset error	15mV	
Recommended maximum input / output distance	Input less than 35 meters, at 1600x1200 @ 60 hours (recommended to use certified DVI dedicated cable, such as Molex TM cable)	
product weight	0.5KG	
Maximum power consumption	15W	

VW-SF4I OPTICAL FIBER INPUT CARD

Features

- 4x single core optical fiber inputs;
- Support hot plugging;
- Matching with optical fiber transmitter can realize input signal transmission of 300 meters (multimode) or maximum 20 kilometers (single mode)
- Optional IO switch card can realize infrared serial port switch;
- Input maximum supported resolution: ： HDPC：1920x1200P@60； HDTV：1920x1080P@60

Technical parameter

Model	**VW-SF4I**
interface	4 high-speed single-core SC fiber interface
video	
Fiber optic interface	SC connector
Fiber type	Multimode/Single Mode (optional)
wavelength	Multimode 850nm/Single Mode: 1310 –1620nm(optional)
Interface bandwidth	Forward: 6.25Gbps, Reverse: 3.125Gbps
Bit Clock Jitter (Clock	<0.15 Tbit
Jitter)	<0.3Tbit (20%--80%)
Bit rise time	<0.3Tbit (20%--80%)
(Risetime)	OM3 multimode fiber: less than 300 meters, single mode fiber: 2 ~ 20 kilometers, at 1920x1080p @ 60
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	0.5KG
Maximum power consumption	20W

VW-HM4O HDMI SEAMLESS OUTPUT CARD

Features

- With 4 channels HDMI-A interface seamless output, 3.5mm audio socket
- Maximum output distance up to 7 meters
- Hot swap of card, audio and video signal switching together
- Analog audio and HDMI embedded audio can output at the same time
- EDID read function
- Compatible with HDMI1.3a standard, HDCP1.3 protocol, DVI1.0 protocol
- Maximum supported resolution: HDPC: 1920x1200P @ 60; HDTV: 1920x1080P @ 60

Technical parameter

Model	**VW-HM4O**
protocol	
HDMI1.3a standard, HDCP1.3 protocol, DVI1.0 protocol;	
video	
Gain	0dB
Pixel bandwidth	165MHz, full digital
Interface bandwidth	2.25Gbps, full digital (total 6.75Gbps, each color is 2.25Gbps)
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;
Clock Jitter	<0.15 Tbit
Risetime	<0.3Tbit (20%--80%)
Bit fall time (Falltime)	<0.3Tbit (20%--80%)
Maximum transmission delay	5nS(±1nS)

interface	4 HDMI-A ports, 4 3.5mm audio jacks	
Signal strength	T.M.D.S. +/- 0.4Vpp	
Min / Max level	T.M.D.S. 2.9V/3.3V	
impedance	50 Ω	
EDID	default EDID and read function (Optional)	N/A
Maximum DC offset error	15mV	
Recommended maximum input / output distance	Input less than 35 meters, at 1600x1200 @ 60 hours (recommended to use certified HDMI Special wire, such as Molex TM wire)	The output is less than 7 meters, at 1600x1200 @ 60 (It is recommended to use certified HDMI dedicated cable, such as Molex TM cable)
product weight	0.5KG	0.5KG
Maximum power	15W	15W

VW-HM2O HDMI 4K SEAMLESS OUTPUT CARD

Features

- 2 channels HDMI-A interface seamless output, 3.5mm audio socket
- The longest output distance is up to 7 meters
- Hot swap, support audio and video signal switching together
- Analog audio and HDMI embedded audio can output at the same time
- EDID read function
- Maximum supported resolution: 4Kx2K @ 30

Technical parameter

MODEL	**VW-HM2O**
protocol	
HDMI1.4 standard, HDCP1.3 protocol, DVI1.0 protocol;	
video	
Gain	0dB
Pixel bandwidth	297MHz, full digital

Interface bandwidth	4.5Gbps full digital (13.5Gbps in total, 4.5Gbps for each color)
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；
Clock Jitter	<0.15 Tbit
Risetime	<0.3Tbit (20%--80%)
Bit fall time (Falltime)	<0.3Tbit (20%--80%)
Maximum transmission	5nS(±1nS)
interface	2 HDMI ports, 3.5mm audio jack
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 offset error	15mV

VW-HD4O HDBaseT SEAMLESS OUTPUT CARD

Features

- 4 channel high-speed RJ45 interface seamless output, 4 channel 6PIN Phoenix connector；
- Use CAT5e / 6 cable to output the longest distance up to 100M；
- Hot swap of card, audio and video signal switching together；
- Infrared serial port output, optional IO switch card, can realize infrared serial port switch；
- Compatible with HDBaseT protocol；
- Maximum supported resolution：

HDPC：1920x1200P@60；
HDTV：1920x1080P@60

Technical parameter

MODEL	**VW-HD4O**
Link port input / output	
interface	4 channel high-speed RJ45 and 4 channel 6PIN Phoenix
Supported protocols	HDBaseT protocol
Pixel bandwidth	165MHz, full digital
Interface bandwidth	2.25Gbps, full digital (total 6.75Gbps, each color is 2.25Gbps)
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;
signal type	High-speed differential signals defined in HDBaseT protocol
Network cable power supply	With POC power supply (+ 48V), for POC For the CAT5 series transmitter of our company, this card input port can provide power to it through the network cable.
impedance	50 Ω
EDID	Default EDIDN/A (Optional)
Recommended maximum input / output distance	Maximum 100 meters, at 1600x1200 @ 60 (recommended to use NEXANS CAT5e / 6 special wire)
product weight	0.5KG
Maximum power	22W

VW-SDI4O SDI SEAMLESS OUTPUT CARD

Features

- 4 channel BNC female interface, 4 way BNC female interface ring out;
- Support hot plugging;
- HD / 3G SDI signal output
- Maximum supported resolution: HDPC: 1920x1200P @ 60; HDTV: 1920x1080P @ 60

Technical parameter

Model	**VW-SDI4O**
interface	4 channels BNC output, 4 channels BNC loop out
Supported protocols	SMPTE 425M, SMPTE 424M, SMPTE 292M, SMPTE 259M-C, DVB-ASI
Pixel bandwidth	2.970Gb/s · 1.485Gb/s · 270Mb/s ·
Resolution	1920x1080@25,1920x1080P@30,1280x720@60,1280x720@50,1920X1080 P@60,1920x1080i@50,1920X1080i@60;
Support format	HD-SDI 3G-SDI
product weight	0.5KG
Maximum power	20W

VW-SF4O FIBER OUTPUT CARD

Features

- 4x single core optical fiber seamless output;
- Support hot plugging; ;
- Matching with optical fiber transmitter can realize the output signal of 300 meters (multi-mode) or a maximum of 20 kilometers (single-mode) transmission;
- Optional IO switch card can realize infrared serial port switch
- Input maximum supported resolution: HDPC: 1920x1200P @ 60; HDTV: 1920x1080P @ 60.

Technical parameter

MODEL	**VW-SF4O**
interface	4 high-speed single-core SC fiber interface
Video	
Fiber optic interface	SC connector

Fiber type	Multimode / Single Mode (optional)
wavelength	Multimode 850nm / Single Mode: 1310-1620nm (optional)
Interface bandwidth	Forward: 6.25Gbps, Reverse: 3.125Gbps
Bit Clock Jitter (Clock	Up to <0.15 Tbit
Jitter)	<0.3Tbit (20%--80%)
Bit rise time	<0.3Tbit (20%--80%)
(Risetime)	OM3 multimode fiber: less than 300 meters, single mode fiber: 2 ~ 20 kilometers, at 1920x1080p @ 60
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	0.5KG
Maximum power	20W

VP-HM4O SEAMLESS HDMI VIDEO WALL OUTPUT CARD

Features

- 4 channel HDMI splicing output card
- Maximum resolution 1920 * 1200
- Each channel supports windows with 2 pictures, overlay, roaming, arbitrary zoom
- Audio de-embedding output

Technical parameter

Model	**VP-HM4O**
Protocol	

HDMI1.3a standard, HDCP1.3 protocol, DVI1.0 protocol;	
Video	
Gain	0dB
Pixel bandwidth	165MHz, full digital
Interface bandwidth	2.25Gbps full digital (total 6.75Gbps, each color is 2.25Gbps)
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；
Control scale	A single unit can control a maximum of 288 screens and multiple sets of screens, which can save and quickly recall 200 plans
Clock Jitter	<0.15 Tbit
Risetime	<0.3Tbit (20%--80%)
Bit fall time (Falltime)	<0.3Tbit (20%--80%)

VP-HM2O SEAMLESS HDMI VIDEO WALL OUTPUT CARD

Features

- 2xHDMI splicing output card
- Maximum resolution 1920 * 1200
- Each channel supports windows with 4 pictures, overlay, roaming, arbitrary zoom
- Audio de-embedding output

Technical parameter

Model	**VP-HM2O**
Protocol	
HDMI1.3a standard, HDCP1.3 protocol, DVI1.0 protocol;	
Video	
Gain	0dB
Pixel bandwidth	165MHz, full digital
Interface bandwidth	2.25Gbps full digital (total 6.75Gbps, each color is 2.25Gbps)

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；
Control scale	A single unit can control a maximum of 288 screens and multiple sets of screens, and can save 200 plans
Clock Jitter	<0.15 Tbit
Risetime	<0.3Tbit (20%--80%)
Bit fall time (Falltime)	<0.3Tbit (20%--80%)

VP-DV4O SEAMLESS DVI Video wall output card

Features

- 4x DVI-D female interface output;
- With splicing function;
- The longest output distance is 7 meters;
- Support hot plugging;
- EDID reading function;
- 4-channel DVI splicing output, the maximum resolution is 1920 * 1200 @ 60HZ;
- Two windows can be opened on a single screen, and signals can be overlap, roaming, and zoomed arbitrarily.

Technical parameter

Model	**VP-DV4O**
Protocol	
DVI1.0 protocol	
Video	
Gain	0dB
Pixel bandwidth	165MHz, full digital
Interface bandwidth	2.25Gbps full digital (total 6.75Gbps, each color is 2.25Gbps)

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；
Control scale	A single unit can control a maximum of 288 screens and multiple sets of screens, which can save and quickly recall 200 plans
Clock Jitter	<0.15 Tbit
Risetime	<0.3Tbit (20%--80%)
Bit fall time (Falltime)	<0.3Tbit (20%--80%)
Maximum transmission	5nS(±1nS)
interface	4 DVI-D ports
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 offset error	15mV
Recommended maximum input / output distance	The output is less than 7 meters, when 1600x1200 @ 60 (recommended to use certified DVI special wire, such as Molex TM wire)
product weight	0.5KG
Maximum power consumption	15W

VP-DV2O SEAMLESS DVI VIDEO WALL OUTPUT CARD

Features

- 2 DVI-D female interface output;
- With splicing function;
- The longest output distance is up to 7M;
- Support hot swap;
- EDID reading function;
- 2-channel DVI splicing output, the maximum resolution up to 1920 * 1200 @ 60HZ;
- The single screen can open 4 windows, the signal can be overlap, roaming, and zoomed arbitrarily.

Technical parameter

Model	VP-DV2O
Protocol	
DVI1.0 protocol	
Video	
Gain	0dB
Pixel bandwidth	165MHz, full digital
Interface bandwidth	2.25Gbps full digital (total 6.75Gbps, each color is 2.25Gbps)
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；
Control scale	A single unit can control up to 288 screens and 5 groups of screens, which can save and quickly recall 200 plans
Clock Jitter	<0.15 Tbit
Risetime	<0.3Tbit (20%--80%)
Bit fall time (Falltime)	<0.3Tbit (20%--80%)
Maximum transmission	5nS(±1nS)
interface	4 DVI-D ports
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 offset error	15mV
Recommended maximum input / output distance	The output is less than 7 meters, when 1600x1200 @ 60 (recommended to use certified DVI special wire, such as Molex TM wire)
product weight	0.5KG
Maximum power	15W

VP-HD4O SEAMLESS HDBaseT VIDEO WALL OUTPUT CARD

Features

- 4 channels high-speed RJ45 interface output, 4 channels 6PIN Phoenix socket interface;
- With splicing function;
- Use CAT5e / 6 cable to output the longest distance up to 100M;
- Support hot swap;
- Infrared serial port output, optional IO switch card, can realize infrared serial port switch;
- Compatible with HDBaseT protocol;
- Has external POC power supply, POC power supply needs to be selected, models above 3636 has this function;
- 4 channel twisted pair splicing output, onboard RS232, IR interface;
- Two windows can be opened on a single screen, and signals can be overlap, roaming, and zoomed arbitrarily.

Technical parameter

Model	**VP-HD4O**
Link port input / output	
Interface	4 high-speed RJ45 seats and 4 6PIN Phoenix seats
Video	
Supported protocols	HDBaseT protocol.
Pixel bandwidth	165MHz, full digital
Interface bandwidth	2.25Gbps, full digital (total 6.75Gbps, each color is 2.25Gbps)
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;
Control scale	A single unit can control up to 288 screens and multiple groups of screens, and can save and quickly recall 128 plans
Signal type	High-speed differential signals defined in HDBaseT protocol
Network cable power supply	With POC power supply (+ 48V), POC power supply needs to be used with the company's CAT5 series transmitter. This card output port can provide power to it
impedance	50 Ω
EDID	N/A
Maximum DC offset error	15mV
Recommended maximum input / output distance	Maximum 100 meters, at 1600x1200 @ 60 (recommended to use NEXANS CAT5e / 6 special wire)
product weight	0.5KG
Maximum power consumption	22W

VP-HD2O SEAMLESS HDBaseT VIDEO WALL OUTPUT CARD

Features

- 2 high-speed RJ45 interface output, 2 6PIN Phoenix connectors;
- With splicing function;
- Use CAT5e / 6 cable to output the longest distance up to 100M;
- Support hot plugging;
- Infrared serial port output, optional IO switch card, can realize infrared serial port switch;
- Compatible with HDBaseT protocol;
- Available for external POC power supply, POC power supply needs to be selected, models above 3636 has this function
- 2 channel twisted pair splicing output, onboard RS232, IR interface;
- 4 windows can be opened on a single screen, and signals can be overlap, roaming, and zoomed arbitrarily.

Technical parameter

Model	**VP-HD2O**
Link port input / output	
interface	2 high-speed RJ45 seats and 2 6PIN Phoenix seats
Video	
Supported protocols	HDBaseT protocol.
Pixel bandwidth	165MHz, full digital
Interface bandwidth	2.25Gbps, full digital (total 6.75Gbps, each color is 2.25Gbps)
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;
Control scale	A single unit can control up to 144 screens and multiple groups of screens, and can save and save 128 plans.
signal type	High-speed differential signals defined in HDBaseT protocol

Network cable power supply	With POC power supply (+ 48V), POC power supply needs to be used with the company's CAT5 series transmitter. This card output port can provide power to it through the network cable.
impedance	50 Ω
EDID	N/A
Maximum DC offset error	15mV
Recommended maximum input / output distance	Maximum 100 meters, at 1600x1200 @ 60 (recommended to use NEXANS CAT5e / 6 special wire)
product weight	0.5KG
Maximum power	22W

About VISSONIC Electronics Limited

Our mission is to develop and manufacture the most comprehensive and innovative audio visual products for our clients. We provide the best performance/price ratio products because it could give you satisfaction just from the time you use them, we believe the good design with cutting edge technology on products will provide value to all our partners and end users. Listen to your demands, we fulfill it.

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