



# **SH3 Specification**

## **Splicing Server**

Version: v2.0.1

Release Date: July 2025

## Revision History

Version Number	Brief description of the revised content	Revision Date	Revisionist
V 2.0.1	Optimize function description and specification format Support fiber optic output board	2 025- 07 - 01	-
V 1.1.2	Updated 4K board silkscreen and rear panel image Optimize the function description about echo and monitoring	2 024-11-11	-
V 1.1.1	Updated features	2 024-01-26	-
V 1.1.0	Update the whole machine load and support video output board	2 024-09-10	-
V1.0.0	Initial release	202 3 - 12 - 12	-

## Product Overview

The SH3 video splicing server is a professional video processing and control device featuring a pure hardware FPGA design architecture and a modular design. It offers a comprehensive range of input and output interfaces, allowing for flexible configuration of input and output boards to meet the needs of different project applications. It is widely used in television stations, dispatch rooms, command centers, exhibition halls, conference rooms, stage performances, data centers, and multi-purpose halls.

The SH3 splicing server supports 8K ultra -high-definition video access, multi-screen and multi-layer management, input and output EDID management , input preview, 3D output, and Genlock , meeting diverse and complex project requirements.

## Product Certification

CCC , ROHS

Kystar immediately for confirmation or processing. Otherwise, if any legal risks are caused, the customer shall bear them by himself or Kystar shall have the right to seek compensation.

## Features

### **3U chassis with flexible expansion and super load capacity**

- A single card supports 8-channel 2K@60Hz input.

- The single board supports 2-channel 4K@60Hz input and supports input of up to 8K × 2K@60Hz .
- The single-board card supports 10 network port outputs and a maximum load of 6.5 million pixels.
- The whole machine supports 40- channel 2K@60Hz input and 56-channel network output at the same time, with a maximum load of 36.8 million pixels.

### **8K input, massive layers**

- Single channel supports DP1.4 input , with a maximum resolution of 8K × 4K @30Hz .
- A single card supports a maximum of 32 2K @60Hz layers, 16 4K @30Hz layers, or 8 4K @60Hz layers.
- A single machine supports up to 32 2K layers .

### **Innovative architecture, layer sharing**

- Unique hardware architecture design builds a layer resource pool for the entire machine , enabling layer resource sharing across the entire machine .

### **Web control, convenient and fast**

- No software installation is required, it uses web -based control and is not restricted by operating systems or platforms.
- The operation is simple and fast, with real-time response and easy configuration of complex scenarios.

- Real-time preview function can be realized without the need for an external monitoring board.

### **Multiple management methods , easy management**

- Scene Management
  - Different preset parameters can be saved as scenes, supporting one-click call of single-screen and multi-screen scenes for easy switching.
- Group screen management
  - Supports management of up to 8 groups of screens, and each group of screens can customize the output resolution, making it easy to complete complex scene display control.

### **Diverse display , rich visual experience**

- Rolling subtitles
  - Subtitles can be displayed statically or scrolled dynamically. Users can set the font, subtitle background, scrolling mode, etc.
  - A single screen supports up to 4 subtitles.
- Seamless switching
  - When switching signals or calling scenes, there is no black screen, no flickering, and no lag during the entire process.

### **Intelligent monitoring and backup , stable and reliable**

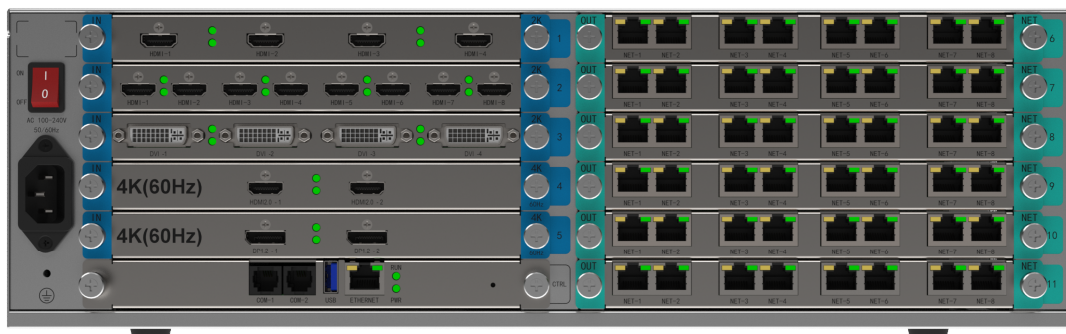
- Real-time hardware monitoring
  - Supports hardware monitoring, including real-time monitoring of each hardware module's temperature and voltage , firmware version, operating status , fan speed , etc.
- Support remote upgrade
  - Program upgrades can be performed remotely, making system maintenance simple.
- Support input module and output module backup
  - Automatic switching in case of failure, double protection of system operation , and the switching process does not affect equipment operation.

## Appearance

### Front panel appearance



### Rear panel appearance



### Illustrate:

The machine back panels posted in this article are all samples and are for reference only. Please refer to the actual product purchased.

Rear panel silk screen description:

**1** The marked slot is an input slot and can only be used to install input cards.

**6** The marked slots are output slots and can only be used to install output cards.

**CTRL** The marked slot is the control board slot and can only be used to install a control board.

## Input Board Introduction

### SHx\_4×DVI Input Board



#### DVI input interface

- Number of input interfaces: 4-way DVI
- Maximum input resolution: 2048×1152@60Hz
- Custom resolution:
  - Maximum width 2048 (2 048 × 1152 @ 60 Hz)
  - Maximum height 2048 ( 1152 × 2048 @ 60 Hz)
- Video input formats: RGB444, YCbCr444 , 4x22 , 4x20

Performance  
parameters

#### Input card specifications

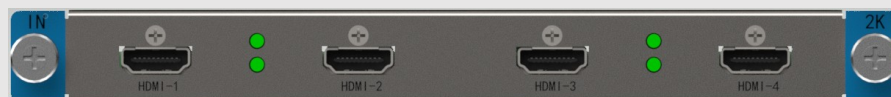
- Input signal level: TMDS /CML
- Impedance: Differential 100ohm
- Power consumption: 5W

#### Indicator status description

- Steady on: Input signal is connected normally
- Off: Input is not connected or input is abnormal

\*From left to right, the top side of the first column of lights indicates DVI-1 , and the bottom side indicates DVI-2 . Similarly, the top side of the second column of lights indicates DVI-3 , and the bottom side indicates DVI-4 .

### SHx\_4×HDMI1.3 input board



Performance  
parameters

#### HDMI 1.3 input interface

- Number of input interfaces: 4 HDMI1.3
- Maximum input resolution: 2048×1152@60Hz
- Custom resolution:
  - Maximum width 2048 (2 048 × 1152 @ 60 Hz)
  - Maximum height 2048 ( 1152 × 2048 @ 60 Hz)
- Video input formats: RGB444, YCbCr444 , 4x22 , 4x20

### Input card specifications

- Input signal level: TMDS /CML
- Impedance: Differential 100ohm
- Power consumption: 5 W

### Indicator status description

- Steady on: Input signal is connected normally
- Off: Input is not connected or input is abnormal

\*From left to right, the top of the first column of lights indicates HDMI-1, and the bottom indicates HDMI-2. Similarly, the top of the second column of lights indicates HDMI-3, and the bottom indicates HDMI-4 .

## SHx\_8×HDMI1.3 input board



### HDMI 1.3 input interface

- Number of input interfaces: 8-way HDMI1.3
- Maximum input resolution: 2048×1152@60Hz
- Custom resolution:
  - Maximum width 2048 (2 048 × 1152 @ 60 Hz)
  - Maximum height 2048 ( 1152 × 2048 @ 60 Hz)
- Video input formats: RGB444, YCbCr444 , 4x22 , 4x20

### Input card specifications

- Input signal level: TMDS /CML

Performance  
parameters

- Impedance: Differential 100ohm
- Power consumption: 10 W

### Indicator status description

- Steady on: Input signal is connected normally
- Off: Input is not connected or input is abnormal

\*From left to right, the first column of lights indicates HDMI-1 on the top and HDMI-2 on the bottom ; the second column of lights indicates HDMI-3 on the top and HDMI-4 on the bottom ; the third column of lights indicates HDMI-5 on the top and HDMI-6 on the bottom; the fourth column of lights indicates HDMI-7 on the top and HDMI-8 on the bottom .

## SHx\_4 × 3G-SDI Input Board



### 3G-SDI input interface

- Number of input interfaces: 4 -channel 3G-SDI
- Maximum input resolution: 1920×1080@ 60Hz
- Video source standards: ST-424 (3G), ST-292 (HD) and SMPTE 259 SD
- Compatible with HD-SDI and SD-SDI standards
- Support loop-out, S DI loop-out interface corresponds to the input interface one to one
- Support 1080i/576i/480i deinterlacing
- Custom input resolution is not supported

### Input card specifications

- Input signal level: TMDS /CML
- Impedance: Coaxial 75ohm
- Power consumption: 10W

### Indicator status description

- Steady on: Input signal is connected normally

Performance  
parameters

- Off: Input is not connected or input is abnormal

\*From left to right, the top of the first column of lights indicates SDI -1 , and the bottom indicates SDI -2 . Similarly, the top of the second column of lights indicates SDI -3 , and the bottom indicates SDI -4 .

## SHx\_2 × IP input board



### Input card specifications

- of input interfaces: 2 RJ14
- Supported protocols: R TSP
- Support IPC video encoding formats: H.264, H.265
- Supports video encoding with decoder encoder.
  - Supports video decoding of unicast streams.
  - Supports H.264/H.265 YUV420 8-bit video decoding of I and P frames.
- Single card simultaneous decoding performance:
  - 2-way 800W
  - 6-way 400W
  - 12-way 200W
- Power consumption: 10W

性能参数

### Indicator status description

- Steady on: IP decoding function is normal
- Off: IP decoding function is abnormal

IP-1 on the top and IP-2 on the bottom

## SHx\_2 × HDMI 1.4 input board

Performance  
parameters


## HDMI 1.4 input interface

- Number of input interfaces: 2 -way HDMI 1.4
- Maximum input resolution: 4096×2160@30Hz
- Custom resolution:
  - Maximum width 4096 ( 4096 × 2160@30Hz )
  - Maximum height 4096 ( 2000 × 4096 @ 30 Hz)
- Video input formats: RGB444, YCbCr444 , 4x22 , 4x20
- Support channel-associated audio

## Input card specifications

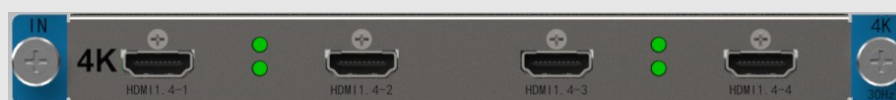
- Input signal level: TMDS /CML
- Impedance: Differential 100ohm
- Power consumption: 5W

## Indicator status description

- Steady on: Input signal is connected normally
- Off: Input is not connected or input is abnormal

\*The first column of lights from left to right indicates HDMI1.4-1 on the upper side and HDMI1.4-2 on the lower side .

## SHx\_4 ×HDMI 1.4 input board



## HDMI 1.4 input interface

Performance parameters

- Number of input interfaces: 4 -way HDMI 1.4
- Maximum input resolution: 4096×2160@30Hz
- Custom resolution:
  - Maximum width 4096 ( 4096 × 2160@30Hz )
  - Maximum height 4096 ( 2000 × 4096 @ 30 Hz)
- Video input formats: RGB444, YCbCr444 , 4x22 , 4x20

- Support channel-associated audio

### Input card specifications

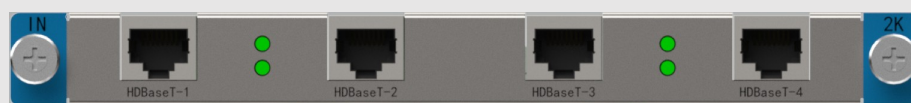
- Input signal level: TMDS /CML
- Impedance: Differential 100ohm
- Power consumption: 10W

### Indicator status description

- Steady on: Input signal is connected normally
- Off: Input is not connected or input is abnormal

\*From left to right, the top of the first row of lights indicates HDMI 1.4-1 , and the bottom indicates HDMI 1.4-2 . Similarly, the top of the second row of lights indicates HDMI 1.4-3 , and the bottom indicates HDMI 1.4-4 .

## SHx\_4 ×HD Base T\_2K Input Board



### HDBase T\_2K input interface

- of input interfaces: 4 RJ45 interfaces
- Maximum input resolution: 2048×1152@60Hz
- Custom resolution:
  - Maximum width 2048 (2 048 × 1152 @ 60 Hz)
  - Maximum height 2048 ( 1152 × 2048 @ 60 Hz)
- Support channel-associated audio

### Input card specifications

- Input signal level: TMDS /CML
- Impedance: Differential 100ohm
- Power consumption: 20W
- Transmission distance: Maximum 100 meters (category 6 twisted pair)

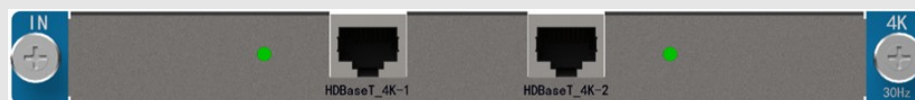
Performance  
parameters

### Indicator status description

- Steady on: Input signal is connected normally
- Off: Input is not connected or input is abnormal

\*From left to right, the top of the first column of lights indicates HDB enzyme T-1 , and the bottom indicates HDB enzyme T-2 . Similarly, the top of the second column of lights indicates HDB enzyme T-3 , and the bottom indicates HDB enzyme T-4 .

## SHx\_2 ×HD Base T\_4K30 Input Board



### HDBaseT\_4K30 input interface

- of input interfaces: 2 RJ45 interfaces
- Maximum input resolution: 4096×2160@30Hz
- Custom resolution:
  - Maximum width 4096 ( 4096 × 2160@30Hz )
  - Maximum height 4096 ( 2000 × 4096 @ 30 Hz)
- Support channel-associated audio

Performance  
parameters

### Input card specifications

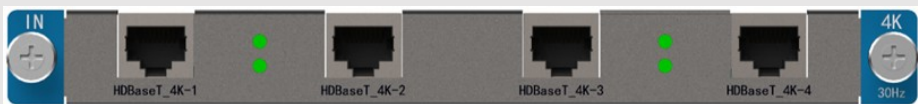

- Input signal level: TMDS /CML
- Impedance: Differential 100ohm
- Power consumption: 10W
- Transmission distance: Maximum 100 meters (category 6 twisted pair)

### Indicator status description

- Steady on: Input signal is connected normally
- Off: Input is not connected or input is abnormal

HDB enzyme T-1 on the upper side and HDB enzyme T-2 on the lower side .

## SHx\_4 ×HD Base T\_4K30 Input Board

<p>Performance parameters</p>	<div data-bbox="435 221 1356 324">  </div> <h3>HDBaseT_4K30 input interface</h3> <ul style="list-style-type: none"> <li>● of input interfaces: 4 RJ45 interfaces</li> <li>● Maximum input resolution: 4096×2160@30Hz</li> <li>● Custom resolution: <ul style="list-style-type: none"> <li>- Maximum width 4096 ( 4096 × 2160@30Hz )</li> <li>- Maximum height 4096 ( 2000 × 4096 @ 30 Hz )</li> </ul> </li> <li>● Support channel-associated audio</li> </ul> <h3>Input card specifications</h3> <ul style="list-style-type: none"> <li>● Input signal level: TMDS /CML</li> <li>● Impedance: Differential 100ohm</li> <li>● Power consumption: 20W</li> <li>● Transmission distance: Maximum 100 meters (category 6 twisted pair)</li> </ul> <h3>Indicator status description</h3> <ul style="list-style-type: none"> <li>● Steady on: Input signal is connected normally</li> <li>● Off: Input is not connected or input is abnormal</li> <li>● *From left to right, the top of the first column of lights indicates HDBase T_4K -1 , and the bottom indicates HDBase T_4K -2 . Similarly, the top of the second column of lights indicates HDBase T_4K -3 , and the bottom indicates HDBase T_4K -4 .</li> </ul>
SHx_1 × 12G-SDI Input Board	
<p>Performance parameters</p>	<div data-bbox="435 1543 1340 1641">  </div> <h3>12G-SDI input interface</h3> <ul style="list-style-type: none"> <li>● Number of input interfaces: 1- channel 12G-SDI</li> <li>● Maximum input resolution: 4096×2160@ 60Hz</li> <li>● Video source standards: ST-2082-1 (12G), ST-2081-1 (6G), ST-424 (3G),</li> </ul>

ST-292 (HD), and SMPTE 259 SD

- Compatible with 6G-SDI, 3G-SDI, HD-SDI and SD-SDI standards
- Support loop-out
- Support 1080i/576i/480i deinterlacing
- Custom input resolution is not supported

### Input card specifications

- Input signal level: TMDS /CML
- Impedance: Coaxial 75ohm
- Power consumption: 10W

### Indicator status description

- Steady on: Input signal is connected normally
- Off: Input is not connected or input is abnormal

## SHx\_1 ×HDMI 2.0 input board



### HDMI 2.0 input interface

- Number of input interfaces: 1 -way HDMI 2.0
- Maximum input resolution: 4096×2160@60Hz or 7680×1200@60Hz
- Custom resolution:
  - Maximum width 8192 ( 8192 × 1080@60Hz )
  - Maximum height 8192 ( 1000 × 8192 @ 60 Hz)
- Video input formats: RGB444, YCbCr444 , 4x22 , 4x20
- Support channel-associated audio

### Input card specifications

- Input signal level: TMDS /CML
- Impedance: Differential 100ohm
- Power consumption: 5W

### Indicator status description

- Steady on: Input signal is connected normally
- Off: Input is not connected or input is abnormal

## SHx\_1 × DP1.2 input board



### DP 1.2 input interface

- Number of input interfaces: 1 DP 1.2
- Maximum input resolution: 4096×2160@60Hz or 7680×1200@60Hz
- Custom resolution:
  - Maximum width 7680 ( 7680 × 1200@60Hz )
  - Maximum height 7680 ( 1080 × 7680 @ 60 Hz )
- Video input formats: RGB444, YCbCr444 , 4x22 , 4x20
- Support channel-associated audio

### Input card specifications

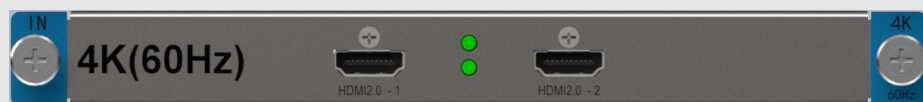
- Input signal level: TMDS /CML
- Impedance: Differential 100ohm
- Power consumption: 5W

### Indicator status description

- Steady on: Input signal is connected normally
- Off: Input is not connected or input is abnormal

Performance  
parameters

## SHx\_2 × HDMI2.0 input board



Performance  
parameters

## HDMI 2.0 input interface

- Number of input interfaces: 2 -way HDMI 2.0
- Maximum input resolution: 4096×2160@60Hz or 7680×1200@60Hz
- Custom resolution:
  - Maximum width 8192 ( 8192 × 1080@60Hz )
  - Maximum height 8192 ( 1000 × 8192 @ 60 Hz)
- Video input formats: RGB444, YCbCr444 , 4x22 , 4x20
- Support channel-associated audio

## Input card specifications

- Input signal level: TMDS /CML
- Impedance: Differential 100ohm
- Power consumption: 10W

## Indicator status description

- Steady on: Input signal is connected normally
- Off: Input is not connected or input is abnormal

\*From left to right, the first column of lights, the upper side indicates HDMI2.0-1 , and the lower side indicates HDMI2.0-2 .

## SHx\_2 × DP1.2 input board



## DP 1.2 input interface

Performance parameters

- Number of input interfaces: 2 -way DP 1.2
- Maximum input resolution: 4096×2160@60Hz or 7680×1200@60Hz
- Custom resolution:
  - Maximum width 7680 ( 7680 × 1200@60Hz )
  - Maximum height 7680 ( 1080 × 7680 @ 60 Hz)
- Video input formats: RGB444, YCbCr444 , 4x22 , 4x20

- Support channel-associated audio

### Input card specifications

- Input signal level: TMDS /CML
- Impedance: Differential 100ohm
- Power consumption: 10W

### Indicator status description

- Steady on: Input signal is connected normally
- Off: Input is not connected or input is abnormal

\*From left to right, the first column of lights, the upper side indicates DP1.2-1 , and the lower side indicates DP1.2-2 .

## SHx\_1 × DP1.4\_8K Input Board



### DP1.4 input interface

- of input interfaces: 1 DP1.4
- Maximum input resolution: 7680 x 4320@30Hz or 7680 x 2160@60Hz or 3840 x 2160@ 120Hz
- Custom resolution:
  - Maximum width 15360 ( 15360 × 1080@30Hz )
  - Maximum height 15360 ( 1000 × 15360 @ 30 Hz)
- Video input formats: RGB444, YCbCr444 , 4x22 , 4x20
- Support channel-associated audio

### Input card specifications

- Input signal level: TMDS /CML
- Impedance: Differential 100ohm
- Power consumption: 1.5W

### Indicator status description

- Steady on: Input signal is connected normally
- Off: Input is not connected or input is abnormal

## Output Board Introduction

### SHx\_8×NET output board



### Network output interface

- 8-way R J45 Gigabit network port
- The maximum supported resolution of a single card is 5.2 million pixels, and the maximum supported resolution of a single network port is 4,096 pixels .
- Single network port load
  - outputting 60Hz frame rate, 8bit supports 650,000 pixels
  - outputting 120Hz frame rate, 8bit supports 320,000 pixels
- Support network port backup
- Supports arbitrary layout of network port positions within the device load range

### Output card specifications

- Power consumption: 5W

### Network port indicator status description

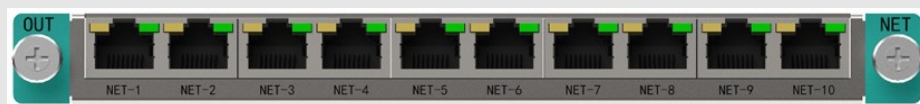
- The yellow light is off, and the green light is off: The network cable is not connected or the network port hardware is faulty.
- Yellow light is always on, green light is always on: connection is normal, no communication

Performance parameters

- Yellow light flashes, green light is always on: connection is normal, communication is normal

\*Single network port, the left side is yellow and the right side is green.

## SHx\_10×NET output board



### Network output interface

- 10-way R J45 Gigabit network port
- The maximum supported pixel count for a single card is 6.5 million pixels, and the maximum supported pixel count for a single network port is 4,096 pixels .
- Single network port load
  - outputting 60Hz frame rate, 8bit supports 650,000 pixels
  - outputting 120Hz frame rate, 8bit supports 320,000 pixels
- Support network port backup
- Supports arbitrary layout of network port positions within the device load range

Performance parameters

### Output card specifications

- Power consumption: 5W

### Network port indicator status description

- The yellow light is off, and the green light is off: The network cable is not connected or the network port hardware is faulty.
- Yellow light is always on, green light is always on: connection is normal, no communication
- Yellow light flashes, green light is always on: connection is normal, communication is normal

\*Single network port, the left side is yellow and the right side is green.

## SHx\_8xNET+2 x Fiber Output Board



### Network output interface + optical fiber output interface

- 8- way RJ45 Gigabit network port + 2 -way 10G optical fiber output interface
- The maximum supported pixel count for a single card is 5.2 million pixels, and the maximum supported pixel count for a single network port is 4,096 pixels .
- Single network port load
  - outputting 60Hz frame rate, 8bit supports 650,000 pixels
  - outputting 120Hz frame rate, 8bit supports 320,000 pixels
- Support network port backup
- Supports arbitrary layout of network port positions within the device load range
- Optical fiber output interface:
  - Standalone mode: Single fiber output port with a maximum load of 5.2 million pixels
  - -2 on the same layer card as the backup output port of Fiber -1 ;

Performance parameters

### Output card specifications

- Power consumption: 10W

### Network port indicator status description

- The yellow light is off, and the green light is off: The network cable is not connected or the network port hardware is faulty.
- Yellow light is always on, green light is always on: connection is normal, no communication

- Yellow light flashes, green light is always on: connection is normal, communication is normal

\*Single network port, the left side is yellow and the right side is green.

## SHx\_4×DVI output board



### DVI output interface

- Output interface quantity: 4 -way DVI
- Maximum output resolution: 2048×1152@60Hz
- Custom resolution:
  - Maximum width 4096 (4096×616@60Hz)
  - Maximum height 4096 (480×4096@60Hz)
- Video output format: RGB444
- Support channel-associated audio

### Output card specifications

- Output signal level: TMDS /CML
- Impedance: Differential 100ohm
- Power consumption: 5W

### Note:

- Can only be inserted into the 5th and 6th layer output slots

## SHx\_4×HDMI1.3 output board



### HDMI 1.3 output interface

- Output interface quantity: 4 -way HDMI 1.3
- Maximum output resolution: 2048×1152@60Hz
- Custom resolution:

- Maximum width 4096 ( 4096×616@60Hz )
- Maximum height 4096 ( 480×4096@60Hz )
- Video output format: RGB444
- Support channel-associated audio

### Output card specifications

- Output signal level: TMDS /CML
- Impedance: Differential 100ohm
- Power consumption: 5 W

### Note:

- Can only be inserted into the 5th and 6th layer output slots

## SHx\_4×HDMI1.3\_AUDIO output board



### HDMI 1.3 output interface

- Output interface quantity: 4- way HDMI 1.3 , 4- way 3.5 mm audio output
- Maximum output resolution: 2048×1152@60Hz
- Custom resolution:
  - Maximum width 4096 ( 4096×616@60Hz )
  - Maximum height 4096 ( 480×4096@60Hz )
- Video output format: RGB444
- Support channel-associated audio

### Output card specifications

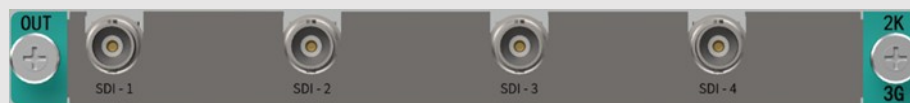
- Output signal level: TMDS /CML
- Impedance: Differential 100ohm
- Power consumption: 5 W

### Note:

- Can only be inserted into the 5th and 6th layer output slots

Performance  
parameters

## SHx\_4×3G-SDI Output Board



### 3G-SDI output interface

- Output interface quantity: 4 -channel 3G-SDI
- Maximum output resolution: 1920×1080@ 60Hz
- Output video source standards: ST-424 (3G), ST-292 (HD) and SMPTE 259 SD
- Compatible with HD-SDI and SD-SDI standards
- Support 1080i deinterlaced output
- Support output timing selection

### Output card specifications

- Output signal level: TMDS /CML
- Impedance: Coaxial 75ohm
- Power consumption: 5W

### Note:

- Can only be inserted into the 5th and 6th layer output slots

## SHx\_1×HDMI2.0 output board



### HDMI 2.0 output interface

- Output interface quantity: 1- way HDMI 2.0 , 1- way 3.5 mm audio output
- Maximum output resolution: 4096×2160@60Hz or 7680×1200@60Hz
- Custom resolution:
  - Maximum width 8192 ( 8192 × 1080@60Hz )
  - Maximum height 8192 ( 1000 × 8192 @ 60 Hz)
- Video output format: RGB444

- Support channel-associated audio
- Support 3.5mm audio output

### Output card specifications

- Output signal level: TMDS /CML
- Impedance: Differential 100ohm
- Power consumption: 5W

### Note:

- Can only be inserted into the 5th and 6th layer output slots

## SHx\_1×DP1.2 output board



### DP 1.2 output interface

- Output interface quantity: 1 DP 1.2 , 1 3.5 mm audio output
- Maximum output resolution: 4096×2160@60Hz or 7680×1200@60Hz
- Custom resolution:
  - Maximum width 7680 ( 7680 × 1200@60Hz )
  - Maximum height 7680 ( 1000 × 7680 @ 60 Hz)
- Video output format: RGB444
- Support channel-associated audio
- Support 3.5mm audio output

### Output card specifications

- Output signal level: TMDS /CML
- Impedance: Differential 100ohm
- Power consumption: 5W

### Note:

- Can only be inserted into the 5th and 6th layer output slots

Performance  
parameters

## Control Board Introduction

## SHx \_control board

Performance  
parameters



### Interface parameters

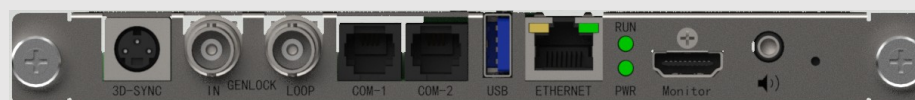
- COM-1: RS232 control port, can be connected to the central control system
- COM-2: RS232 control port, can be connected to the central control system; can be used as the COM-1 loop-out port
- USB: USB 3.0 port, used for system upgrades only and cannot be used to power other devices.
- ETHERNET: Gigabit Ethernet port, communication interface, connected to control computer, router or switch for Web control and pre-monitoring

### Indicator status description

- RUN light status
  - Flashing: The device is starting up
  - Fixed frequency flashing: 1/2S, the system is operating normally
  - No flash or no light: System failure (after the device is turned on)
- PWR indicator status
  - Steady on: The device is powered normally.
  - Off: The device power supply is abnormal.


## SHx \_Enhanced Control Card

Performance  
parameters



### Interface parameters

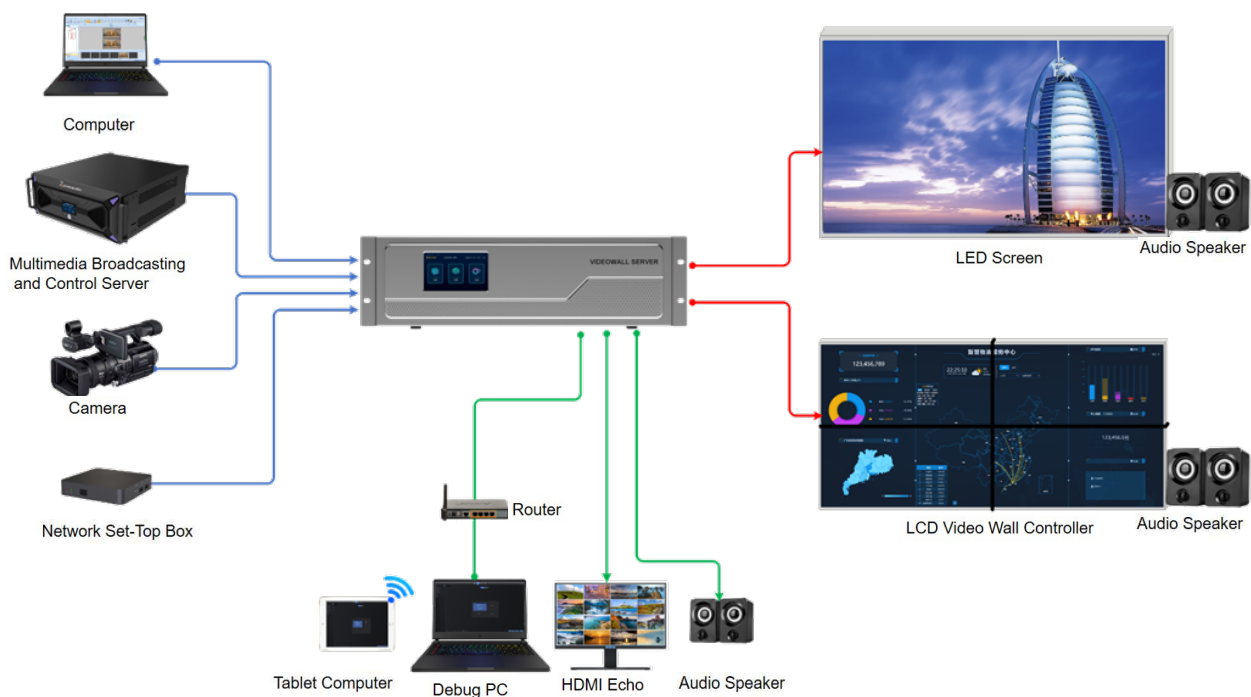
- 3D-SYNC : 3D synchronization signal output interface
- GENLOCK : External synchronization signal source

- IN: External signal source input
- LOOP: Synchronous output of external signal source
- COM-1 : RS232 control port, can be connected to the central control system
- COM-2 : RS232 control port, can be connected to the central control system; can be used as COM-1 loop-out port
- USB : USB 3.0 port , used only for system upgrades and cannot be used to power other devices.
- ETHERNET : Gigabit Ethernet port, communication interface, connected to control computer, router or switch for Web control and pre-monitoring
- Monitor : HDMI display interface . Output resolution: 1920×1080@60Hz
-  Audio output interface : You can set a certain input source audio output to the large screen speaker or for audio monitoring in the control room

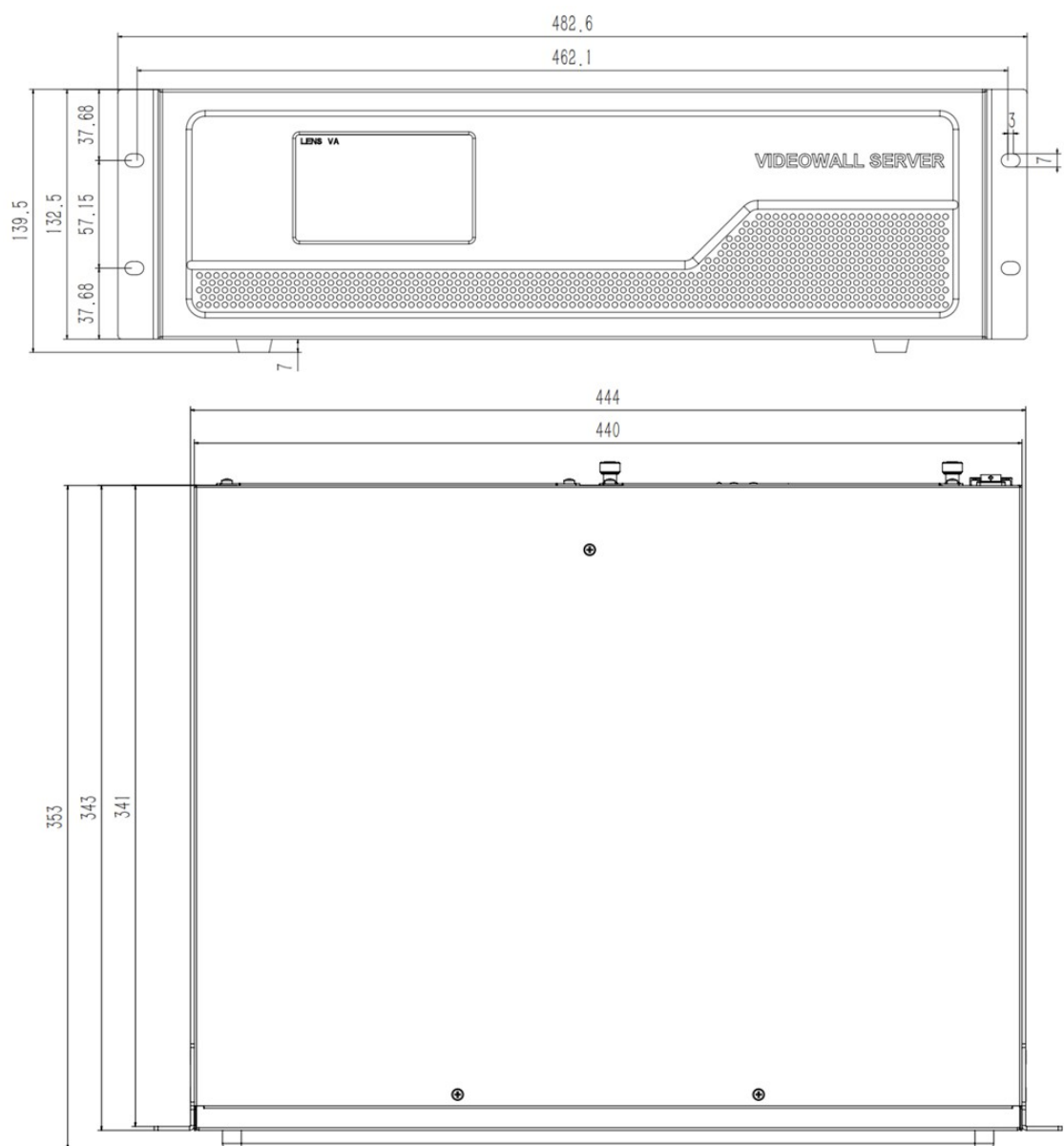
### Indicator status description

- RUN light status
  - Flashing: The device is starting up
  - Fixed frequency flashing: 1/2S, the system is operating normally
  - No flash or no light: System failure (after the device is turned on)
- PWR indicator status
  - Steady on: The device is powered normally.
  - Off: The device power supply is abnormal.

## Scene topology diagram



## Size



Unit: mm


## Specifications

Product Specifications	
Model	SH3
Chassis specifications	3U
Maximum number of supported input cards	5 sheets
Maximum number of supported input channels	Route 40
Maximum number of supported output cards	6 sheets
Maximum number of supported output network ports	Route 56
Maximum number of layers	32
Input power	100-240V~, 50/60Hz, 3-1.5A
Power consumption of the whole machine	1 60W
Work Environment	0 ~45 °C, 0% RH ~ 80% RH, non-condensing
Storage environment	-20 °C ~65 °C, 0%RH~95%RH, non-condensing
Dimensions	4 82.6mm × 353mm × 139.5mm (L×W×H)
Packing size	565mm × 465mm × 285mm (L×W×H)
Net weight	10KG
Gross weight	11KG

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