| Specifications | H5 | H9 |
|---|---|---|
| Chassis | 5U | 9U |
| Max, Loading Capacity (LED 4K sending card) | 31.2million pixels | 52million pixels |
| Max, Input Cards | 10 | 15 |
| Max, Output Cards | 3 | 5 |
| Irregular screen configuration | √ | √ |
| Max, Layers | A single card supports 16 layers | |
| Max, Presets | 2000 | 2000 |
| 10bit、HDR、3D | √ | √ |
| Redundant Power (optional) | √ | √ |

| Allows for flexible configuration of input cards | |
|---|---|
| Name | Description |
| H_4xDVI input card | DVI×4 |
| H_4xHDMI input card | HDMI1.3×2+HDMI1.4×2 |
| H_1xHDMI2.0+1xDP1.2 input card | HDMI2.0×1+DP1.2×1 |
| H_2xRJ45 IP input card | RJ45 Gigabit Ethernet ports ×2 |
| H_4x3G SDI input card | 3G-SDI×4 |
| H_2xCVBS+2xVGA input card | CVBA×2+VGA×2 |
| H_4xVGA input card | VGA×4 |
| Allows for flexible configuration of output cards | |
| Name | Description |
| H_16xRJ45+2xfiber sending card | RJ45 Gigabit Ethernet outputs ×16+OPT outputs ×2 |
| H_2xRJ45+1xHDMI1.3 preview card | RJ45 Gigabit Ethernet outputs ×2+HDMI1.3×1 |

# H

# H Series Flagship
# Video Splicing Processor

Solving complex problems
has never been so simple

# H Series

![H Series processors]

H Series is NovaStar's flagship all-in-one video splicing processor, designed specifically for fine-pitch LED applications. H Series utilizes a full hardware slot structure with high-performance FPGA processing and ultra-speed Crosspoint matrix switching technology, providing powerful signal processing capabilities. It is the first All-in-One splicer and controller in the industry, which greatly simplifies system integration.  H Series features true 4K video processing. With the leading image processing technology in the industry, it can give you an astonishing visual effect, truly making it the perfect solution for fine-pitch LED applications.

## Traditional solution (cumbersome)

Video Processor

LED Controllers × 20
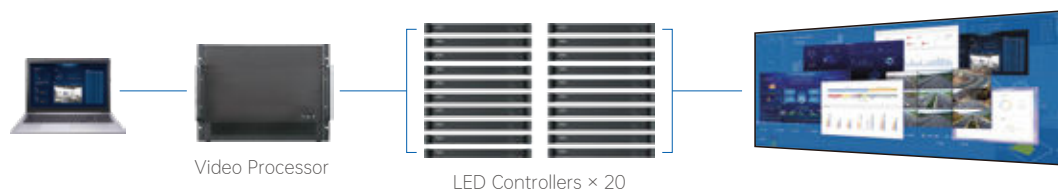
## Optimization (simple)

H9

## Application scenarios:

Energy and power

Education and research

Military command center

Meteorology and earthquake

Hydrology

Metallurgy

National security

Judicial prisons

Production control

Broadcasting
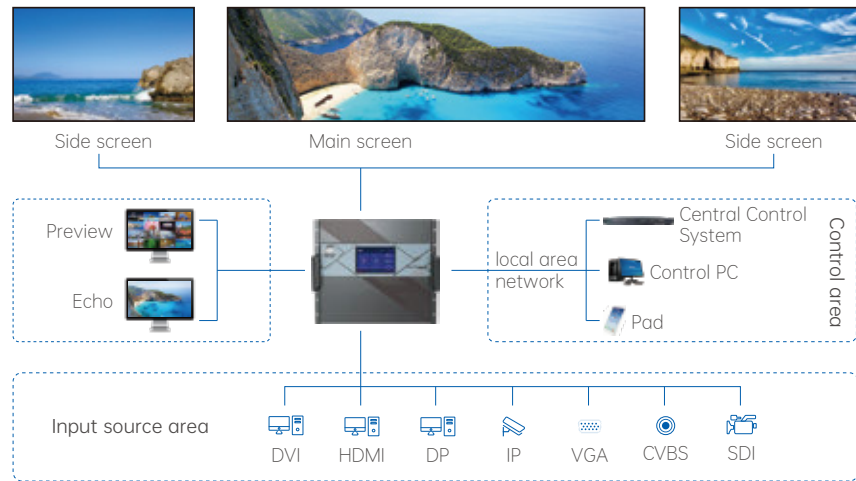
Exhibitions

Enterprise management

Banking and finance

Public security and traffic

## All-in-One — Simple design, yet complex integration

While utilizing module mainframe connerctivity, the H series highly integrates splice processing and display control to achieve true All-in-One, which simplifies system interconnection structure for customers. It will also reduce equipment failure rates, and improve equipment operation and maintenance to a whole new level.



Side screen          Main screen                    Side screen

Preview

Echo

Central Control System

Control PC

Pad

local area network

Control area

Input source area

DVI    HDMI    DP    IP    VGA    CVBS    SDI

## True Flexibility — Awakens new sensory experience

H series supports numerous layers with an unrestricted arrangement. Each output daughterboard provides 16 layers (Up to 16 layers maximum per port). The layers can freely cross different output loading areas while keeping layer size the same. Layers can be in any position, overlapped, or unlimited scaled. It supports functions such as image capture, layer configuration, layer rotation, and more. This all helps you realize your creativity and create a captivating visual effect.



Intercept

Preset scene

Layer flip

Supports BKG and OSD layers

## True 4K — Display every pixel in its intended beauty

To meet the client's display requirements, H Series achieves true 4K (4K x 2K@60Hz, RGB 4:4:4, 10bit) signal collection, processing, and output. It can be configured with DP1.2, HDMI2.0, or other high-definition 4K daughterboards to realize ultra-high-resolution display. Input and output signal support full 60FPS smooth processing without lag or frame loss, fully showcasing the details of the image. The entire system has 10bit color depth processing, which sharply increases color expressiveness and provides a smoother transition for better image quality.



4K×2K 10bit

4K×1K

1080P

30FPS

60FPS
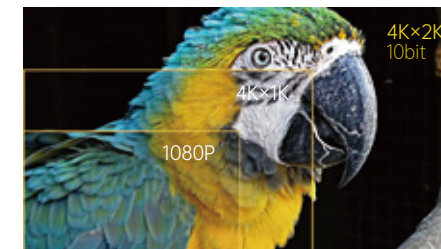
## High image quality — Rebuild original vision

To handle the existing requirements of fine-pitch displays, H Series features comprehensive image quality enhancements. The internal high-definition image processing engine, support for HDR, wide color gamut transmission, high contrast, and abundant colors, those all provide more details in both light and shadow. NovaStar's HQ high-quality scaling technology, which includes an adaptive content scaling engine. This technology prevents loss of details and border errors when zooming out, as well as jagged edges and blurring when zooming in, allowing for a perfect recovery of the original image.



SDR          HDR

Original drawing

Traditional scaling          Nova HQ scaling

![NovaStar logo]

## Super stability — Multiple safeguards for peace of mind

Hot plugs for inputs and outputs and Smart data recovery functions provide safety, stability, and convenient operation. An industrial-grade redundant power module ensures stable operation for the course of your entire application.



Dual power    Hot plugs
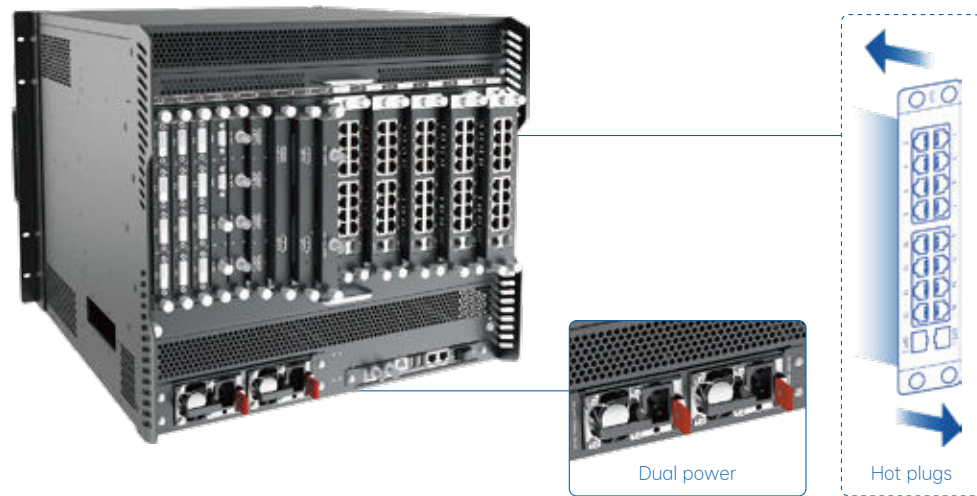
The LCD touch screen on the front panel provides real-time monitoring of the main device and daughterboard transmission status, further increasing stability. Supports real-time display readback from the screen, which gives you total control over your application for a truly trouble-free experience.



Real-time monitoring of the main device and daughterboard transmission status

## More Features:

**3D**
Supports 3D display

Supports web and mobile control

**EDID**
Supports EDID and sequence management

Supports special-shaped splicing

Supports input monitoring and output display readback

**OSD BKG**
Supports BKG and OSD layers

Supports device online self-check

**Genlock**
Supports Genlock

Supports input image capture

Supports 200 users simultaneously online, with authorization management

Supports 3840x2160@30Hz network camera

Supports fade-in and fade-out, with seamless switching

**2000**
Supports 2000 user presets

Supports Real-time monitoring, smart alarms