**Ab**sen

Trusted LED Supplier

# New HC Series

Indoor Narrow Pixel Pitch Display

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# New HC Series

The new HC series is a narrow pixel pitch display,
featuring stunning HD vividness, lightweight design, and both safety and stability.

| 136" 4K | 163" 4K | 217" 4K | 271" 4K |
|---------|---------|---------|---------|
| P0.7mm | P0.9mm | P1.2mm | P1.5mm |

# Simple Front & Back Design

Rich detail for an exceptional viewing experience.

| HC Ⅱ | 600x337.5x50mm | 5.2KG | Die cast aluminum |
|------|----------------|-------|-------------------|
| Product | Panel Dimensions | Weight | Material |

> IMD 4-in-1 Package

> New HC Series

**IMD 4-in-1 Package**
Integrated package technology

**HBB Technology**
High brightness with low power consumption

**Large Screen Splicing**
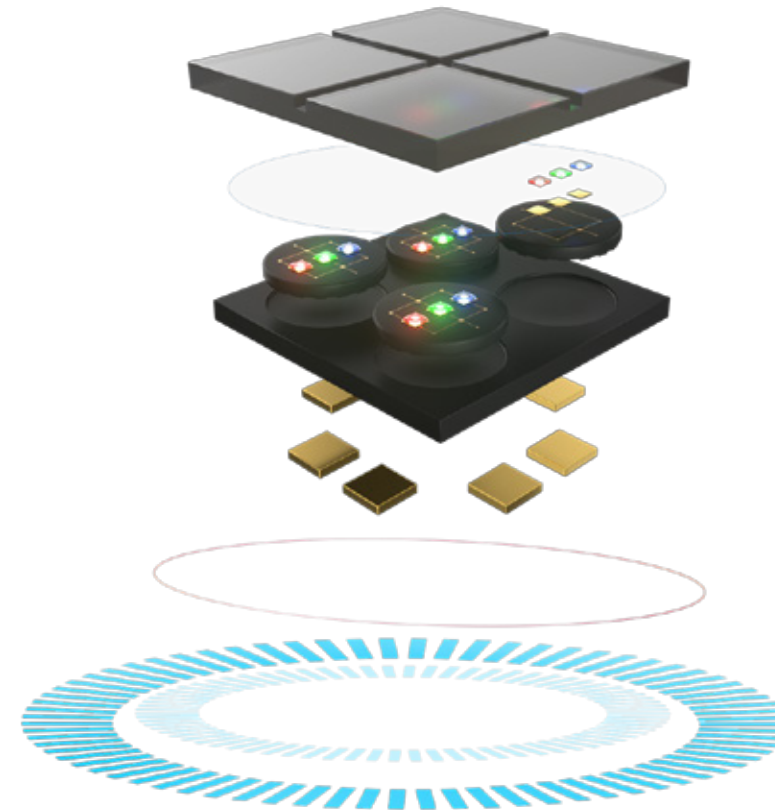Supports standard 2K/4K/8K resolution

**Lightweight**
Min. weight: 5.2KG

**Stunning View**
Professional image processing technology

**3D Precise-Align**
Seamless splicing

**X2.5**
Improved anti-collision ability

**20%**
Contrast enhancement

**X3**
Flatness improvement

# Fast Data Transmission

The single-channel signal transmission rate is up to 5Gbps, which perfectly supports 8K and above ultra-clear display solutions.

| conventional P0.7 display | **VS** | HC0.7 Pro Ⅱ display |

### Network cable no.

100 pcs            16 pcs

Splicing an 8K screen with HC0.7 Pro Ⅱ product requires only 1/6 of the number of network cables required by a conventional P0.7 display, with neater screen alignment and lower failure rate.

### Control box no.

16 pcs            1 pcs

Conventional P0.7 products require 16 control boxes to splice an 8K screen, while HC0.7 Pro Ⅱ only requires one main control system.

Applicable to HC0.7 Pro Ⅱ products

**Absen**

# HBB Energy-saving Technology

## Precision Power

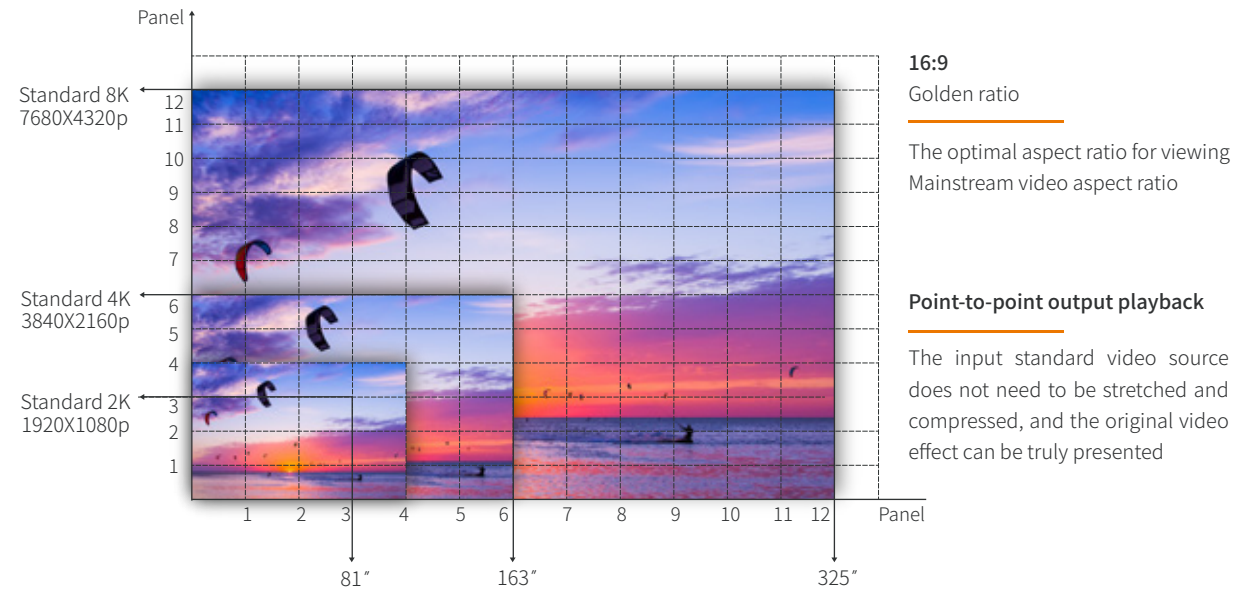Ultra-low power

30% higher brightness

## High Performance

Brighter whites

Deeper blacks

Superior thermal management

# ⟩ Large Screen Splicing

Perfect 16:9 display ratio and can be spliced into standard resolution of 2K/4K/8K.

Take P0.9 as an example



**16:9**
Golden ratio

The optimal aspect ratio for viewing Mainstream video aspect ratio

**Point-to-point output playback**

The input standard video source does not need to be stretched and compressed, and the original video effect can be truly presented

| Model | 3 x 3 | 4x 4 | 5 x 5 | 6 x 6 | 8 x 8 | 10 x 10 | 12 x 12 | 16 x 16 | 20 x 20 |
|---|---|---|---|---|---|---|---|---|---|
| HC0.7 Pro Ⅱ | | | 3840 x 2160 | | | 7680 x 4320 | | | |
| HC0.9 Pro Ⅱ | 1920 x 1080 | | | 3840 x 2160 | | | 7680 x 4320 | | |
| HC1.2 Ⅱ HC1.2 Pro Ⅱ | | 1920 x 1080 | | | 3840 x 2160 | | | 7680 x 4320 | |
| HC1.5 Ⅱ | | | 1920 x 1080 | | | 3840 x 2160 | | | 7680 x 4320 |

# ⟩Ultra Light & Thin

Light weight design，20% lighter than similar products.



weights
Only 5.2kg

# ⟩ Stunning View

Absen professional image processing technology improves visual performance in the shadows with richer details. Thanks to this technology, seven major problems of LED displays like crossed dead pixels, lack of uniformity in low gray scale, line scan issues, color shift, dark lines, high-contrast interference and ghosting effect can be solved.

## • Low brightness and high grayscale

Compared with the traditional way of adjusting brightness at the expense of gray scale, the new HC series products are designed with high-end chips with PWM function to further improve the display gray scale, and the picture is delicate at low brightness, and the gray scale is excessively uniform and without jump. Reduce the brightness without losing the grayscale.


Details lost in the shadows


Details still visible in the shadows


Poor transition of gray scale


Smooth transition of gray scale

## • Ultra-high refresh rate

The new HC series uses Scrambled-PWM (S-PWM) to enhance the modulation on the pulse width and splits the turn-on time into several shorter ones, thus increasing the visual refresh rate.


Slow response to moving objects,blurring images


Quick response to moving objects,clear images


Low refresh rate, photo taken with scan lines


High refresh rate, photo taken without scan lines

## • Sharper images

Image sharpening also enhances the contrast of the gray scale to make blurred images clearer. It can also help decrease the ghosting effect that can happen on text. The new HC series can use its sharpening to improve details at the edge of objects so that the edges, outlines and image details are all clear.


Before sharpening


After sharpening

## • HDR10/HLG*

Equipped with professional color management technology, the hardware perfectly supports the HDR10/HLG standard, eliminates color deviation, and the color performance is closer to the human perception.


color management technology


color management technology


HDR/HLG standard*

*HDR10/HLG: Applicable to HC0.7 Pro II model.

## • Enhanced colors

By handling the white balance and color cast,the image can trully display the material color to improve visual effects and image definition. On the other side,if colors in the area with low brightness are affected by the area with high brightness,the new HC series can take countermeasures to eliminate the high-contrast interference.


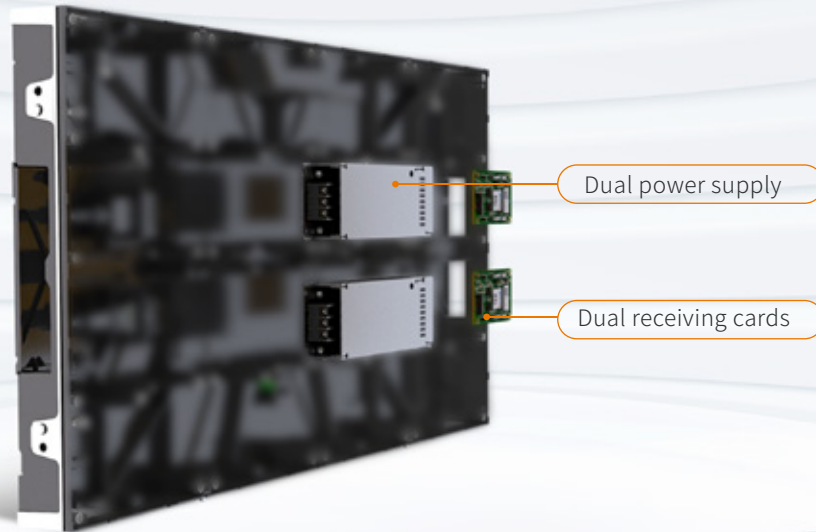Display effect at low gray scale,with color lumps and dead brightness zone.


Display effect at high gray scale,with natural color transition

# ❯ Power & Data Redundancy

Featuring dual receiving cards & dual power supply, the product ensures continuity of information transmission with no power cut or signal loss, particularly for control room and studio scenarios.



Dual power supply

Dual receiving cards

# ❯ Automated Module Correction

The module has an automatic calibration function. After the module is replaced, the panel automatically reads the calibration data of the module without manual setting.



The image effect of the replaced module is different, so manual correction is required

Automatically read the calibration data without manual setting

# ❯ 3D Precise-Align Technology

With Precise-Align technology, panel and module can achieve three dimensions adjustment，which makes the surface of product flat and clear.



Y-Direction

Z-Direction

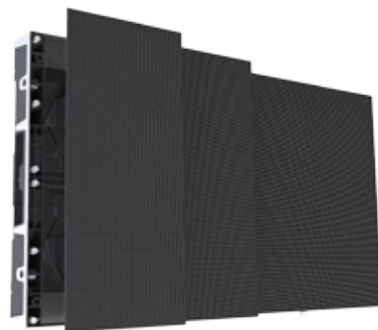X-Direction

# Fast & Flexible Installation

Supports stacking installation and wall mounting installation.

Wall hangers

# Convenient Maintenance

Full front maintenance, including modules, receiving card, and power supply can be front maintenance.

16:9 Module

Receiving card

Power supply

# Safety, Stability And Reliable Quality

### Safety

UL94-V0-rated flame-retardant key materials

UL94-V0
Flame-retardant

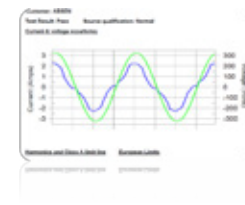### Stability

MTBF≥5000H, 24/7 operation

24 hours

### Comfort

Offers a < 25dB mute working environment for the utmost comfort

### Low radiation

Used for residential, commercial, and light industry, etc., with safety guarantee. Complies with EMC Class B standards

### Completely certified

Passed CE, FCC, CB, RoHS certifications, etc.

# Applications



•Control Room



•TV Studio



•Conference Room

## ⊙Parameters

| Model | New HC Series | | | | |
|---|---|---|---|---|---|
| | HC Pro Ⅱ | | | HC Ⅱ | |
| | 0.7 Pro | 0.9 Pro | 1.2 Pro | 1.2 | 1.5 |
| LED type | IMD | IMD | IMD | SMD | SMD |
| Pixel pitch (mm) | 0.78 | 0.93 | 1.25 | 1.25 | 1.56 |
| Brightness (nit) | 600 | 600 | 600 | 600 | 600 |
| Refresh rate (Hz) | 3840 | 2880 | 3840 | 3840 | 3840 |
| Grayscale (Bit) | 15 | 14 | 14 | 14 | 14 |
| Power (Max./Avg.)(W/m²) | 340/115 | 680/225 | 510/170 | 520/175 | 420/140 |
| Viewing angle (H/V) (°) | 160/120 | 160/125 | 160/120 | 160/120 | 160/140 |
| Panel size (WxHxD)/(mm) | 600x337.5x50 | 600x337.5x50 | 600x337.5x50 | 600x337.5x50 | 600x337.5x50 |
| Panel resolution | 768x432 | 640x360 | 480x270 | 480x270 | 384x216 |
| Module size (WxH)/(mm) | 150x168.75 | 150x168.75 | 150x337.5 | 150x337.5 | 150x337.5 |
| Panel weight (single power supply/ dual power supply) (kg) | 5.9/6.4 | 5.7/6.2 | 5.2/5.6 | 5.2/5.6 | 5.2/5.6 |
| Panel material | Die cast aluminum | Die cast aluminum | Die cast aluminum | Die cast aluminum | Die cast aluminum |
| Module maintenance | Front maintenance | Front maintenance | Front maintenance | Front maintenance | Front maintenance |
| Operating temperature (°C) | -10~+40 | -10~+40 | -10~+40 | -10~+40 | -10~+40 |
| Operating humidity (RH) | 10%-80% | 10%-80% | 10%-80% | 10%-80% | 10%-80% |