POLARIS

Assemble Your Task Force

NXTGEN
Embrace The Future

3840hz

Memory module

Auto-lock

16Bit

Creative
modules

Common Cathode HDR10

1500nit

HBB

Auto-eject system

front and rear
maintenance

For the Best Image Quality

Enhanced color / High Refresh & Brightness

HDR10   16Bit   1500nit

- Support the latest HDR10 standard & 16bit grayscale, enabling PL2.5 Pro and PL1.9 Pro to deliver a higher dynamic range with pure whites, deeper blacks and a wider color gamut.

- PL2.5 Pro's brightness can reach up to 1500nit after calibration, able to maintain excellent display performance in brighter environment
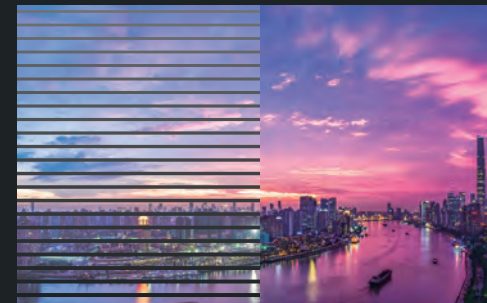

3840hz

- Polaris series supports 3840hz refresh rate, promising outstanding on-camera visual effect, which significantly improves customers' satisfaction and encourages them to share about live events.

2 Extremely creative

With newly-created triangular and circular modules, PL2.5 Pro offers a variety of creative splicing solutions, providing customers with more options for their stage designs

· Round

· Cube

· Triangle

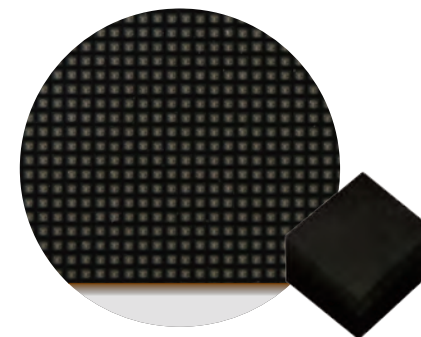POLARIS
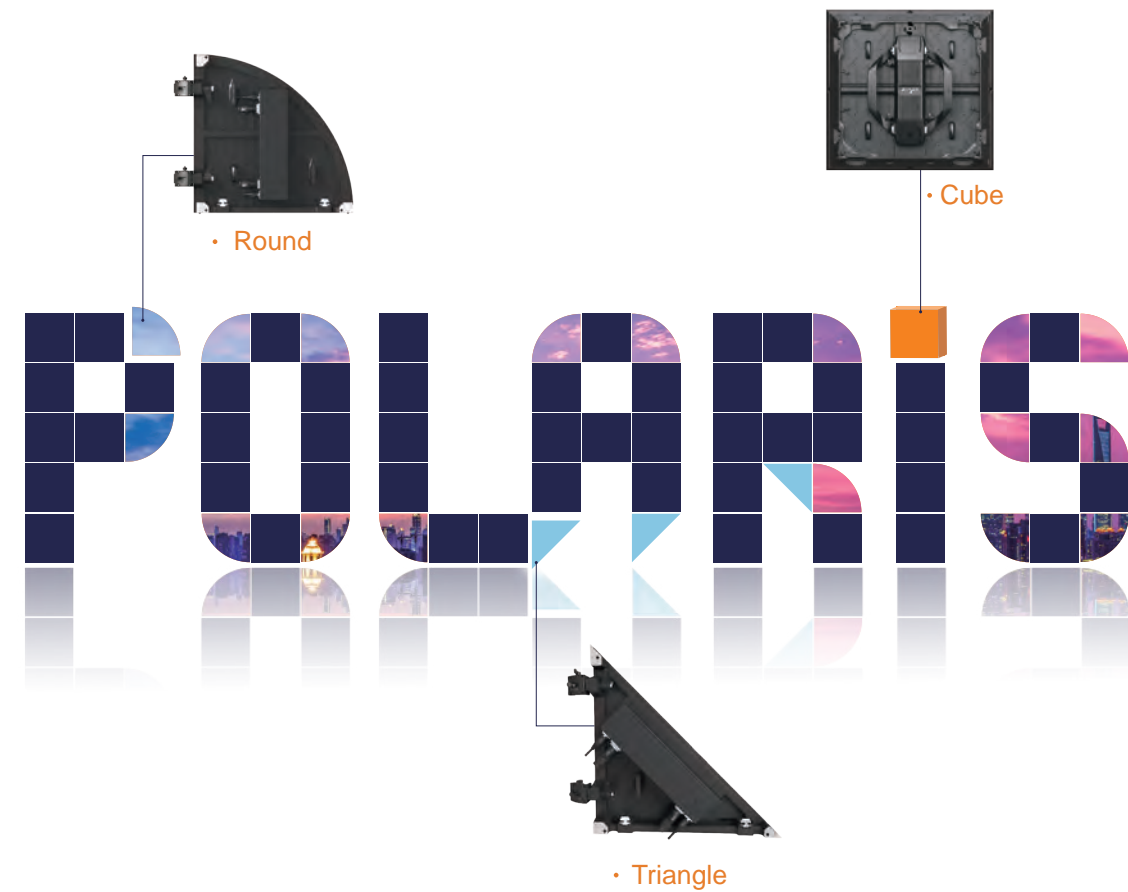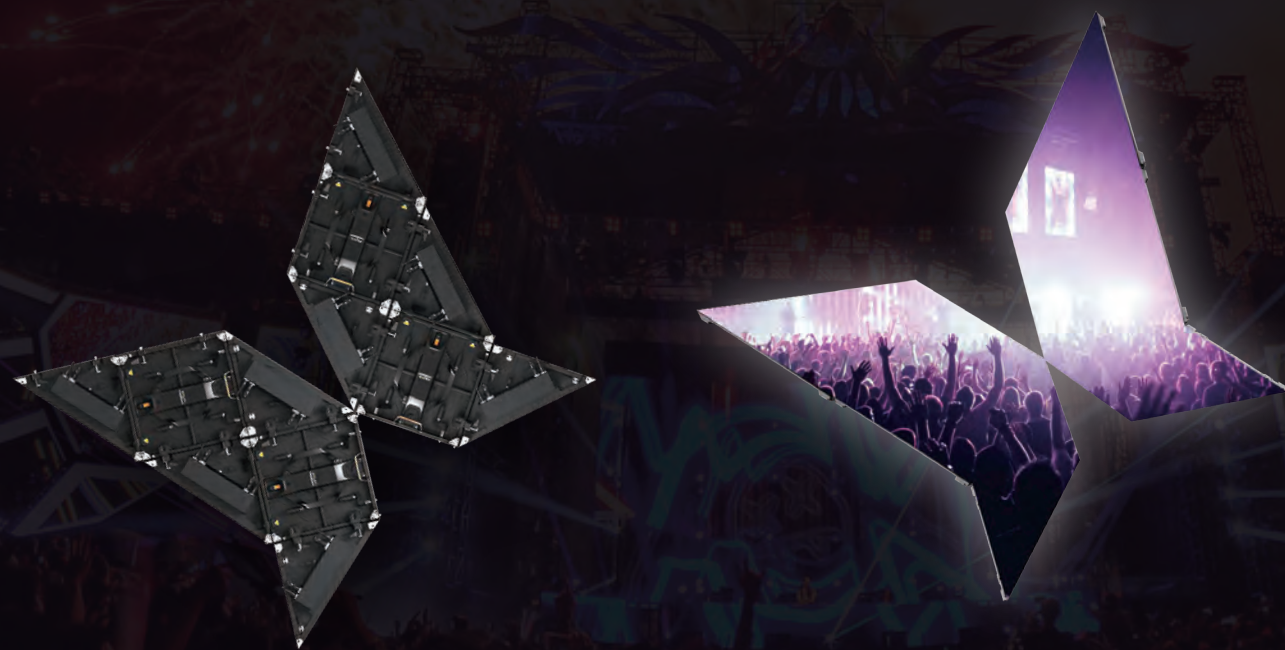
3

Take It Black and Do It Right

The optimal way to configure high performance rental displays – perfectly balanced for extreme contrast and high pixel protection
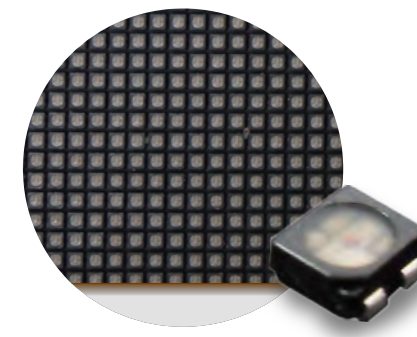
▣ UltraBlack Technology

Small sized non-reflection LEDs, combined with matte and super black mask, the PL2.5 Pro has a superior contrast compared to other LED products.

Manufactured by top tier encapsulation companies, the LEDs are providing state of the art performance in terms of uniformity, non-reflection, in both regular and wide viewing angles. The stringently controlled gluing process ensures high level of uniformity on LED surface as well as super wide viewing angle. The high quality epoxy used is the key to deliver a matte surface, which will dramatically reduce reflection even under direct light. The highest standard of aging test has proven a reliable quality and high uniformity over long time of use, with a failure rate of 30PPM only after the extreme test.
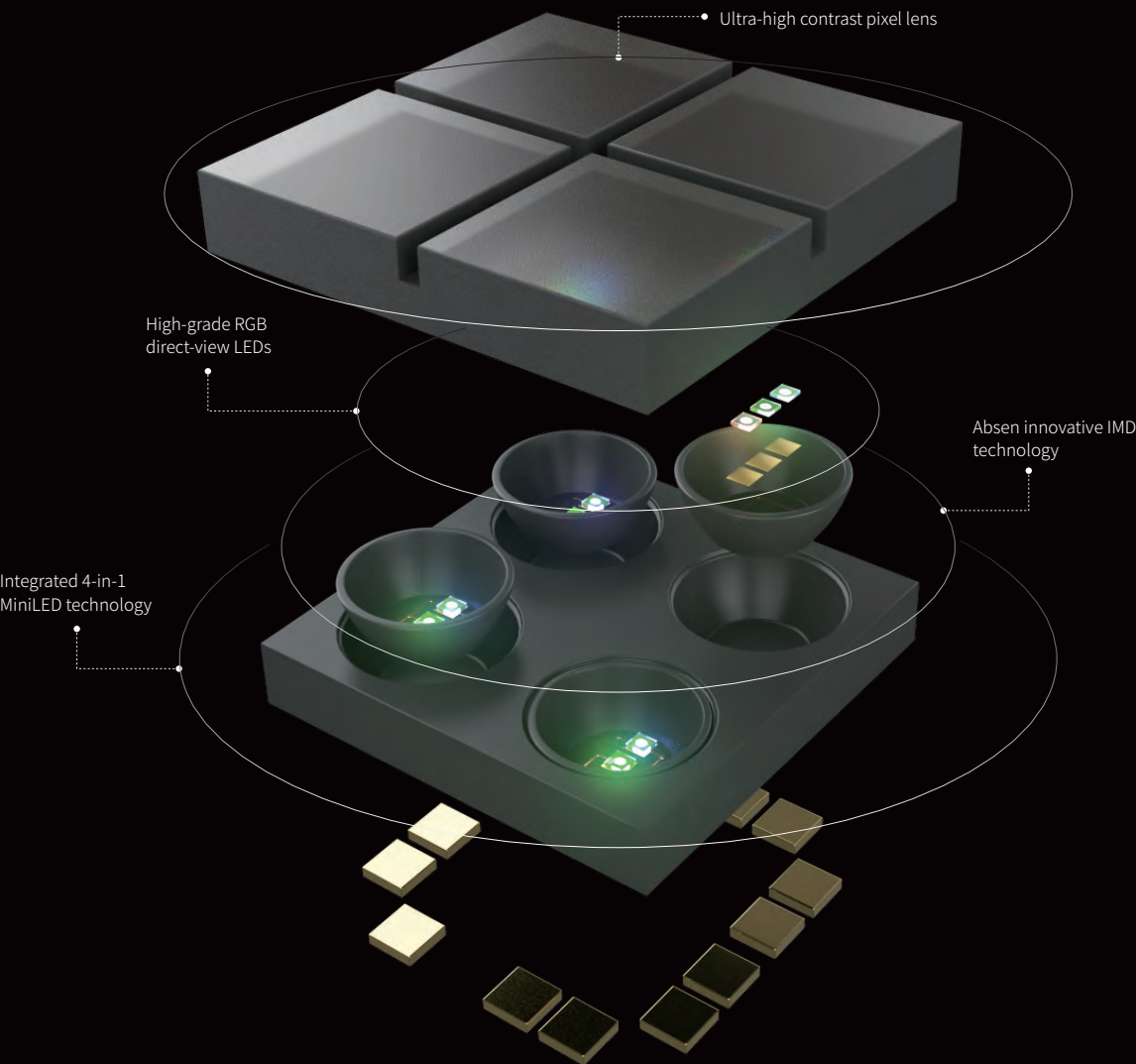
PL 2.5 Pro   SMD 1515

8800 : 1

P2.6 SMD 2121

Absen Innovative IMD Technology

Ultra-high contrast pixel lens

High-grade RGB
direct-view LEDs

Absen innovative IMD
technology

Integrated 4-in-1
MiniLED technology

PL1.9 Pro
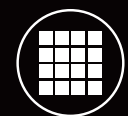
Superior definition

45%
more pixels

45% higher pixel density compared to other 2.3mm rental products to deliver laser-sharp, lifelike images.

Stunning visual performance

30%
Contrast boost

Absen Innovative IMD enables stunning pure colour reproduction along with deep blacks and peak whites.

Maximum strength

x3.3
stronger

Absen Innovative 4-in-1 pixel configuration provides over triple the strength of traditional LED rental screens with the same pixel pitch.

4 Beautiful On The Outside. Beautiful On The Inside

Absen High Brightness Black (HBB) technology – finally, a high resolution indoor and outdoor rental display that doesn't compromise on brightness, contrast or stability

☀ High Contrast & Brightness

Outdoor 1921 HBB with brightness up to 4,500nit and contrast ratio of 7500:1.

Ultra high contrast and distinct color hierarchy ensure excellent visual effect outdoors

Others

1921 HBB

7500:1 4,500nit
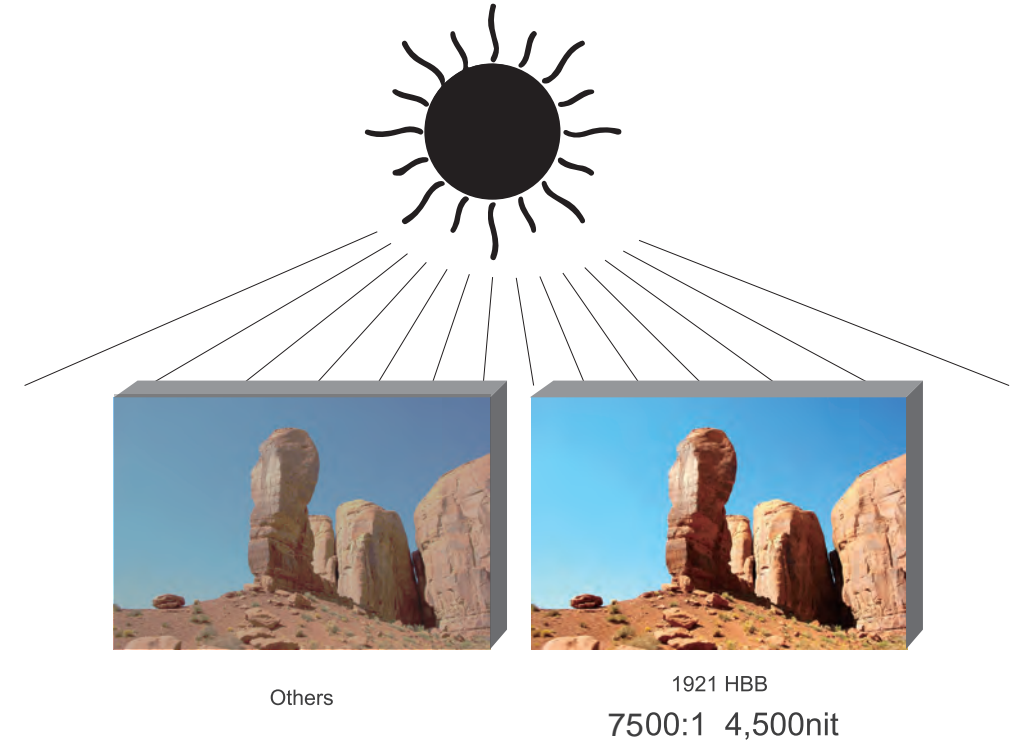
4,500nit HBB for outdoor use under sunlight.

LED common cathode technology improves brightness with better heat dissipation.

Color Uniformity

Precise dual power output of 2.8V and 3.8V mitigates the heat dissipation problems in LED operation with voltage drop and increases the luminous efficiency of red light.
Die-casting AL cabinet with heat plate designed for IC driver layout guarantee extraordinary heat dissipation, color consistency and uniformity.

High Resolution

HD outdoor 3.9mm HBB fits for indoor and outdoor applications.
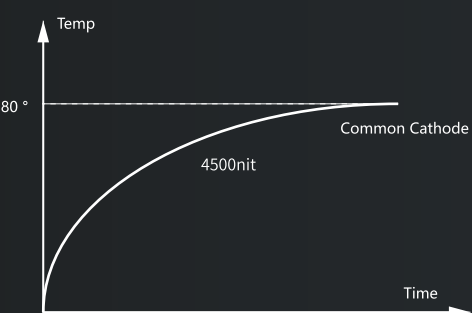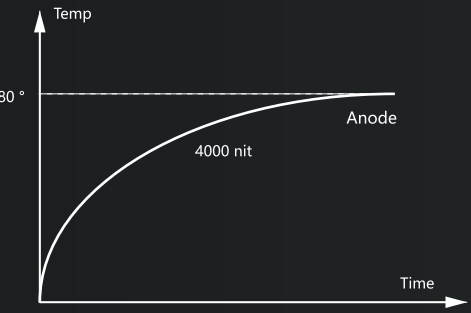

Outdoor   Indoor

20% - Lower Heat, 20% + Higher Brightness

Standing for High Brightness Black, Absen HBB utilises Absen Common Cathode technology, a powerful solution for driving high resolution black LED at ultra high brightness

Traditional Common Anode   Absen HBB Common Cathode

VCC
Pixel Package   Swich
R
+
VR
heat
R

VCC1(2.8V)   VCC2(3.8V)
R   G   B
Pixel Package
R
+
VR
√ RGB separate power supply
√ No external resistors
√ High precision voltage control
√ Low heat dissipation
√ Lower power consumption
√ Higher LED lifespan and uniformity
√ Lower colour shift at low brightness
√ Lower pixel and circuit failure
Swich

Temp
80 °
Anode
4000 nit
Time

Temp
80 °
Common Cathode
4500nit
Time

Operating Temperature：50℃ 24H White display

BETTER VISUAL PERFORMANCE

👁 Viable indoor & outdoor solution

— Higher Utilisation

Indoor + Outdoor

— Support More Applications

Vocal Concert   Car Show   Conference   Stage

— Better ROI(return on investment)

ROI   ROI   ROI   ROI   ROI

PL
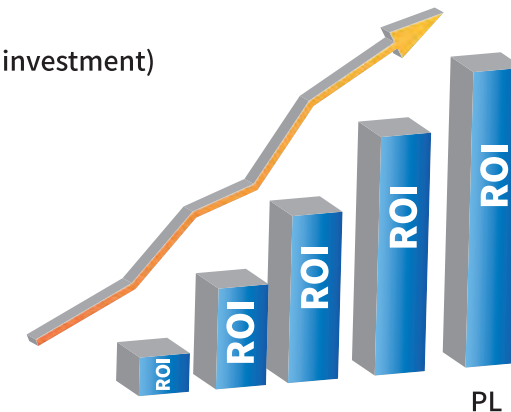
5 Lighten Up and Go Large

Super lightweight and twice the size, perfect for the operational demands of extra large outdoor display applications

FINAL DRAW

Lightweight

① Panel weight only
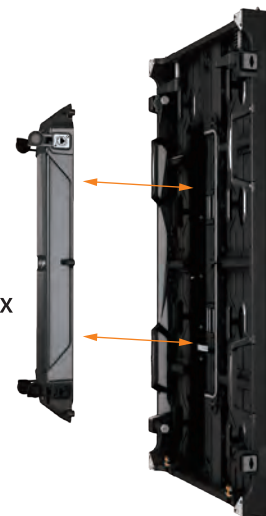**13Kg**

② More than
10% LIGHTER
than regular products

Quick

① One man installation

② Quickly service power box

Advanced

Auto-Lock and Auto-Eject systems

— Auto-locking Vertical Lock System With Magnetic Auto-connection For Fast And Easy 1 Man Installation
With Ultimate Safty And Pixel Procection

— Auto-ejection Side Lock System Enables Super Fast, Easy And Convenient Disconnection Of Panels

1 ≫   Panels will be attached together by magnets
automatically.
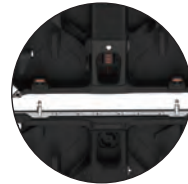
2 ≫   Hold the bottom of the Panels upward.

3 ≫   Pull the knob of top lock system to
lock the Panels.

Advanced
inner and outer curve lock systems

— Innovative integrated repositionable curve connection block system maintains the highest level of alignment accuracy, in both flat or curve configuration.

Curve connection blocks are available to support any increment of curve from -7.5 convex to +10 concave giving users unlimited design flexibility and control.

Fast rear service

Rear serviceable with universal modules

Quickly replace power and data core without tools

Full front & rear maintenance available
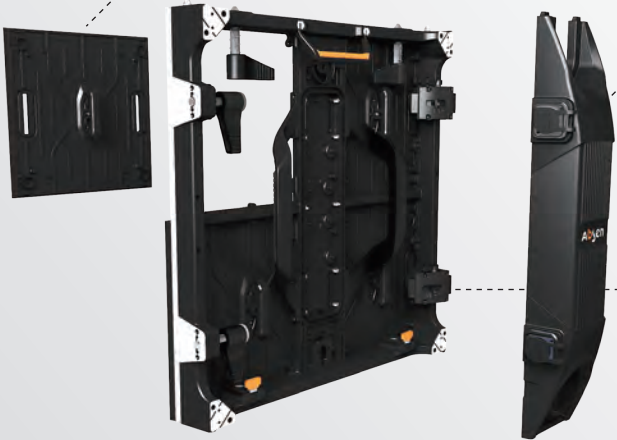
Additional benefits

① Memory on Module/Hub

Calibration data stored in both module /Hub and receiving card, no need re-calibration after replacement

HUB card

Recerive Card

Read

Store

Read

Store

Read

Store

Read

Store

Module

Computer

② Processing

Premium image quality, 4K processing

Absen Process

4K image

③ Advanced
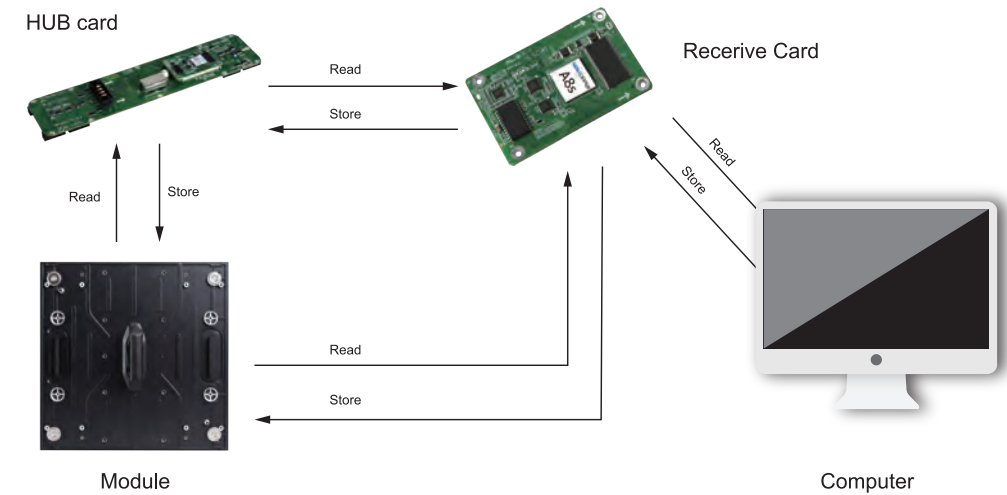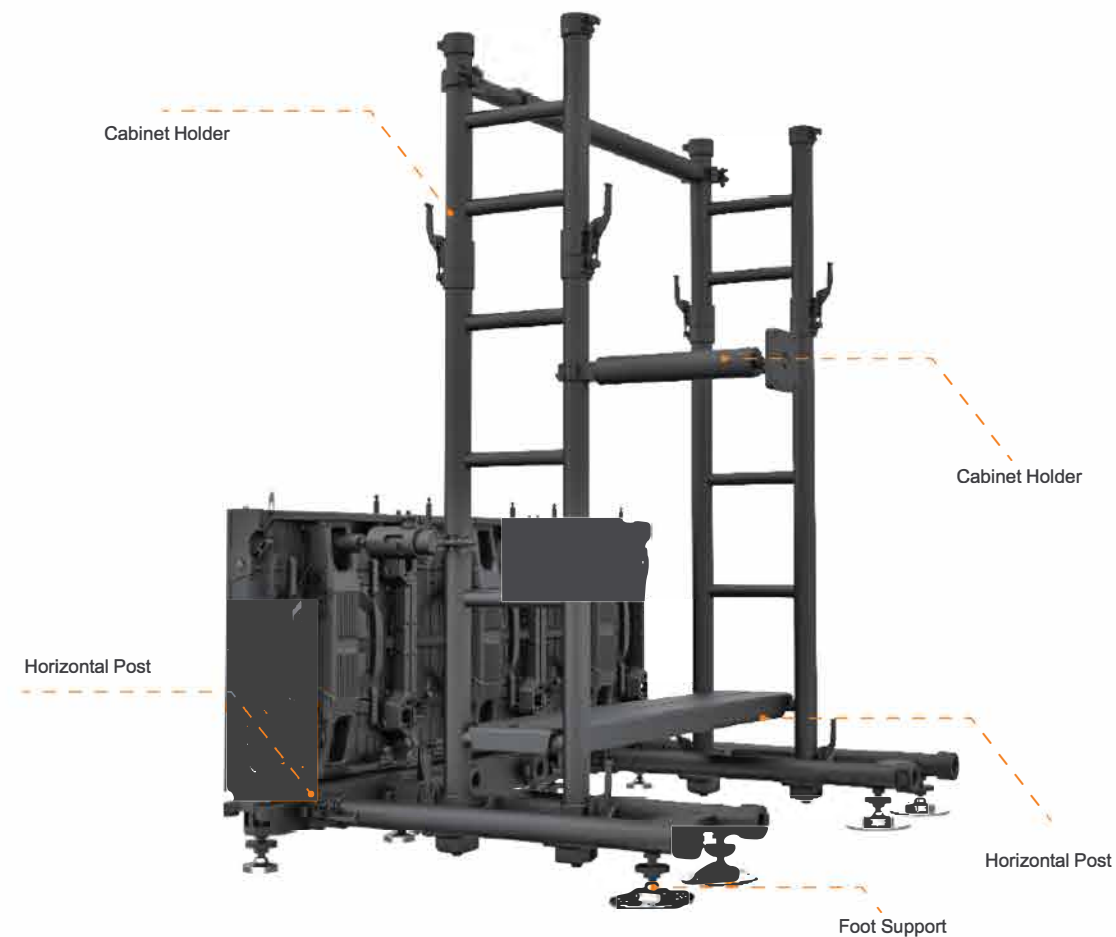### calibration and uniformity

Refresh rate up to 3840Hz, delivers extraordinary image quality even at 1/3000 high-speed camera, with no flickering, perfectly meet the high demand of switching pictures smoothly at broadcasting.

P2.5

P2.9

P3.9
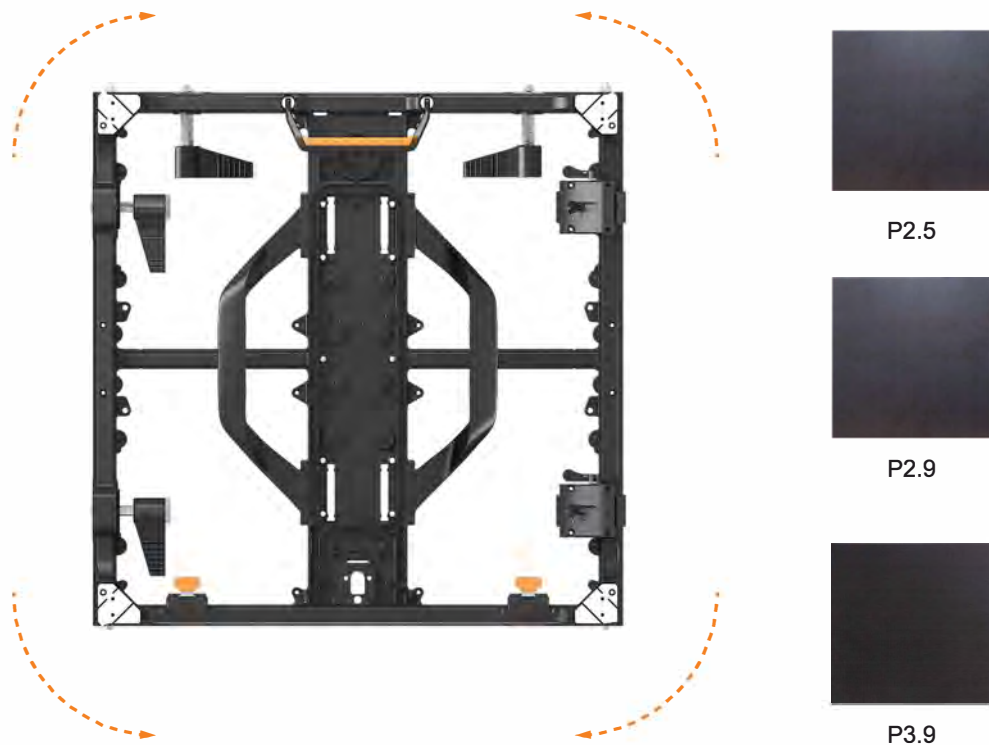
④ Advanced
stacking system

Cabinet Holder

Cabinet Holder

Horizontal Post

Horizontal Post

Foot Support

⟨5⟩ **About Absen**

Absen is the world's leading manufacturer of LED displays, covering both indoor and outdoor applications for rental and fixed installations.Established in 2001 and headquartered in Shenzhen, China, Absen has successfully delivered 35,000 projects in over 120 countries.

Through constant innovation and development, Absen has been the top Chinese exporter of LED displays, making it the brand of choice for many of the most prominent rental staging companies worldwide.

From live concerts and festivals to corporate conferences and events, we offer a comprehensive and award-winning LED product portfolio to help you create stunning visual experiences.

Absen Russia

Absen GmbH

Absen Japan

Absen Dubai

Absen Shenzhen HQ

Absen HK

Absen US

Absen Mexico

Absen Brazil

Absen Brazil

Parameters	PL1.9 Pro V10	PL2.5 Pro V10	PL2.9 V10	PL2.9 XL V10	PL3.9 V10	PL3.9 XL V10	PL3.9 Pro V10	PL3.9 Pro X L V10	PL4.8 Pro V10	PL4.8 Pro XL V10	Unit
Pixel Pitch	1.9	2.5	2.9	2.9	3.9	3.9	3.9	3.9	4.8	4.8	Millimeter
Brightness	1200	1500	1000				4500				nit
Panel Dimensions	500*500*88	500*500*88	500*500*88	500*1000*88	500*500*88	500*1000*88	500*500*88	500*1000*88	500*500*88	500*1000*88	Millimeter
Panel Material	Die casting Aluminum										—
Panel Weight	9	8.6	8	12.6	7.7	12.6	8.4	13.7	8.1	13.7	Kg / Panel
LED Type	IMD	SMD 1515	SMD2121				Common Cathode SMD1921				—
Module Size	250*250										Millimeter
Panel Resolution	256*256	200*200	168*168	168*336	128*128	128*256	128*128	128*256	104*104	104*208	Pixels
Pixel Density	262144	160000	112896	112896	65536	65536	65536	65536	43264	43264	Pixels / sqm
Refresh Rate	≥3840	3840									Hertz
Grayscale	16	16	14								Grade
Viewing Angle(H/V)	140/140	160/140	140/140	140/140	140/140	140/140	140/100	140/100	140/80	140/80	Degree
Ingress Protection	IP40/IP21						IP65/IP54				—
Power(max/ ave.)	774/258	770/260	540/180	540/180	540/180	540/180	680/230	680/230	720/240	720/240	Watts / sqm
Drive mode	1/16	1/20	1/28	1/28	1/16	1/16	1/8	1/8	1/7	1/7	—
Maximum Hanging	20	20	20	10	20	10	20	10	20	10	Panels
Certification	FCC+ETL+CE+RoHS										—