**Product** **Specifications**

**AXION II ChipFlip SERIES**

**Indoor P0.9 Fine Pixel Pitch LED Display**

**• 16:9 aspect ratio**



**Axion II ChipFlip Features**

* “ChipFlip” is a revolutionary new technology of encapsulating fine pixel pitch SMD 1010 LED lamps to PCB boards.
* Traditionally the circuit design for SMD displays for both the Positive pole, the Anode, and the Negative pole, the Cathode, face upwards.  
  However, the circuit design for “ChipFlip” for both the Positive and Negative electrodes face downward and the corresponding encapsulation is called the “ChipFlip” Process.
* The strength of the solder used in the “ChipFlip” Process” is 100 times stronger that that normally used in the SMD process.
* Vanguard will guarantee a failure rate of 5/PPM in year 1, 10/PPM in year 2 and 15/PPM in year 3. The failure rate for SMD displays is 50-100 PPM in year 1.
* The “ChipFlip Process” also employs Common Cathode technology whereby the electric current passes through the Cathode, the negative pole or the ground.
* Power is not on continouously but only draws power as needed. As a result, heat generation is greatly reduced.
* The contrast ratio and color gamut of " Chipflip ", featuring true HDR technology are comparable to the Samsung Wall and Sony’s Crystal LED.
* Brightness levels can reach 4000 nits. Typically only outdoor displays can reach those levels.

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**Axion Technical Specifications**

Specifications

Axion II ChipFlip P0.9

INTERNAL CONNECTIONS

Axion has no external connections

100% internal connections inside cabinet

Data in / out RJ45

AC Power in / out IEC

CABINET

Aspect Ratio 16:9

Cabinet Material Die Cast Aluminum

Cabinet Size 23.62” x 13.28” x 2.28”

Cabinet Resolution 640 x 360

Cabinet Weight 17 lbs.

Service Access Front

IP Rating IP30

ENVIRONMENTAL

Operating Temperature -10°C to +50°C

Storage Temperature -20°C to +60°C

Operating Humidity 20% to 90% RH

AC POWER

Source Voltage 100-240V, 50/60Hz

Max Power Consumption 165W

Avg. Power Consumption 85W

INTERNAL OPERATION

Driving Method 1/32th Scanning

Gray Scale 14-18 bit

IC Driver MBI5153

Refresh Rate >3840Hz

Frame Frequency 60Hz

LED

LED Type SMD1010

LED Configuration 3 in one

Pixel Density 1,131,734/m²

Module Size 11.81” x 6.64”

Module Resolution 320 x 180

Modules Per Cabinet 4

Lifetime to Half Brightness (L50) 100,000

Contrast Ratio 10,000:1

Brightness 600-2500 Nits

Viewing Angle 160° x 160°

Minimum Viewing Distance 3.2 ft.