

# product specification



## AXION SERIES

Indoor P1.8 • 16:9 aspect ratio  
fine pitch wall mounted LED display system



### Overview

Vanguard's Axion Series cabinets have a native aspect ratio of 16:9. If 16:9 cabinets are arrayed with equal cabinet height & width (i.e. 10x10 or 8x8), the entire display will retain a 16:9 viewing aspect ratio. Axion is available in pixel pitches of P0.94, P1.2, P1.3, P1.6, P1.8, P2.5.

Axion is 100% front serviceable. Axion cabinets feature 100% internal cabling – no external jumpers on the rear, making this cabinet ideal for wall mounting. Axion cabinets are designed for wall mounting only. At only 2.28" deep, the Axion cabinet can be wall mounted to meet ADA requirements, and Axion can also be recessed within a wall. Pre-threaded mounting locations make installation simple. Magnetic LED modules make module replacement quick & easy.

### Additional Features

- Fan-less design
- Low Power Consumption
- IC driver specifications allow for customizable refresh & scan rates
- Receiving card specifications allow for custom gray levels from 14-18 bit
- Redundant power & data configurations available for zero failure situations
- No internal jumpers. Cabinets contain a single cable-less PCB connection for data & power per module
- Anti-Moire mask available for camera sensitive angle, depth & distance solutions
- Included seam brightness compensation
- High gray scale & high refresh rate
- Resin encapsulated LED modules available for increased durability
- Available half size cabinets
- Smart module data retention
- Superb color & brightness uniformity
- Refresh rates up to 3840Hz
- Contrast Ratio: 3000:1

# Axion Technical Specifications

## Specifications

### Axion Indoor P1.8

#### LED

<u>LED Type</u>	<u>SMD1515</u>
<u>LED Configuration</u>	<u>3 in one</u>
<u>Pixel Density</u>	<u>390,625/m<sup>2</sup></u>
<u>Module Size</u>	<u>6" x 7.1"</u>
<u>Module Resolution</u>	<u>85 x 96</u>
<u>Modules Per Cabinet</u>	<u>8</u>
<u>Lifetime to Half Brightness (L50)</u>	<u>100,000</u>
<u>Contrast Ratio</u>	<u>3,000:1</u>
<u>Brightness</u>	<u>600-800Nits</u>
<u>Viewing Angle</u>	<u>160° x 160°</u>
<u>Minimum Viewing Distance</u>	<u>5.94 ft.</u>

#### CABINET

<u>Aspect Ratio</u>	<u>16:9</u>
<u>Cabinet Material</u>	<u>Die Cast Aluminum</u>
<u>Cabinet Size</u>	<u>25.20" x 14.17" x 2.28"</u>
<u>Cabinet Resolution</u>	<u>340 x 192</u>
<u>Cabinet Weight</u>	<u>17 lbs.</u>
<u>Service Access</u>	<u>Front</u>
<u>IP Rating</u>	<u>IP30</u>

#### INTERNAL OPERATION

<u>Driving Method</u>	<u>1/15<sup>th</sup> Scanning</u>
<u>Gray Scale</u>	<u>14-18 bit</u>
<u>IC Driver</u>	<u>MB15153</u>
<u>Refresh Rate</u>	<u>&gt;3840Hz</u>
<u>Frame Frequency</u>	<u>60Hz</u>

#### AC POWER

<u>Source Voltage</u>	<u>100-240V, 50/60Hz</u>
<u>Max Power Consumption</u>	<u>135W</u>
<u>Avg. Power Consumption</u>	<u>90W</u>

#### ENVIRONMENTAL

<u>Operating Temperature</u>	<u>-10°C to +50°C</u>
<u>Storage Temperature</u>	<u>-20°C to +60°C</u>
<u>Operating Humidity</u>	<u>20% to 90% RH</u>

#### INTERNAL CONNECTIONS

Axion has no external connections  
100% internal connections inside cabinet

<u>Data in / out</u>	<u>RJ45</u>
<u>AC Power in / out</u>	<u>IEC</u>

# Options

- Redundant Power
- Redundant Data
- Anti Noire Mask
- Resin encapsulated LED modules
- DC – DC remote Power Supply
- Low Latency System – Reduce latency from 4 frames to 0.5 frames

