
aaztec
Complete Digital Solutions
IMMERSIF
microLED

The best microLED display ever.

Experience micro LED displays like never before. True-to-life imagery requires a flawless integration of highly illuminated and dark areas. However, without meticulous backlight control, undesired blooming may occur. That is why we have integrated advanced Chip on Board technology, along with common cathode technology and intelligent image processing, to significantly minimize blooming and present the most breathtaking and seamless visuals imaginable.

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IMMERSIF microLED

microLED at its most brilliant.

IMMERSIF microLED brings refined specular highlights, incredible detail in shadows, and vibrant, true-to-life colours. Each display is calibrated in the factory and features pro reference modes for HDR colour grading.

ClearView

for cinematic viewing

StudioMotion

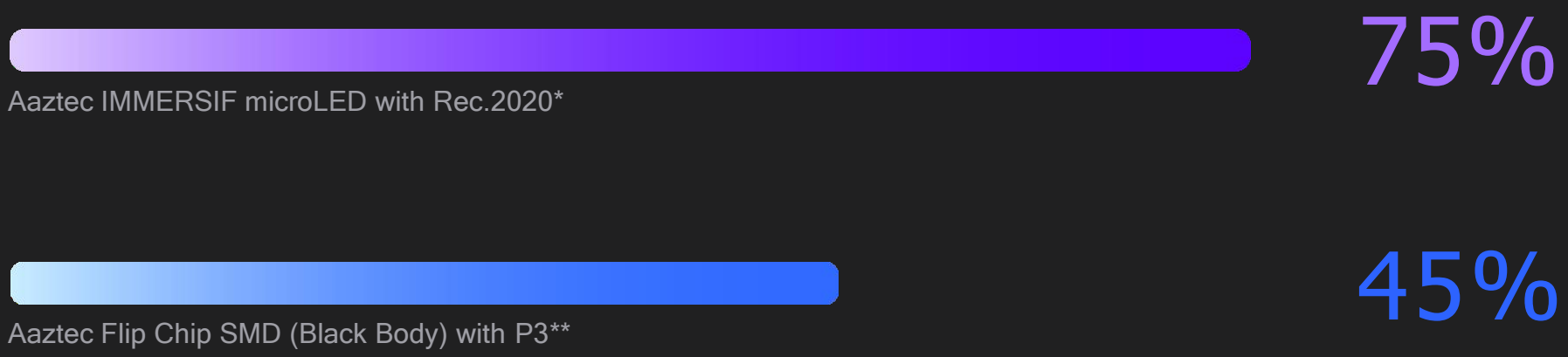
adaptive 3840Hz refresh rate

Rec.2020

ultrawide colour gamut

See how IMMERSIF microLED stack up compared to Flip Chip SMD and SMD.

Visible light spectrum / Contrast / Energy consumption



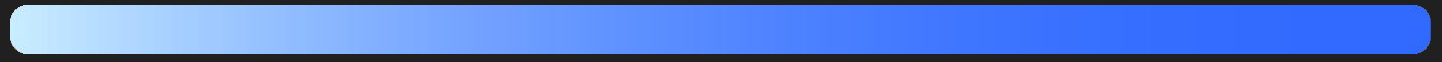
*600mm x 337.5mm x 39mm cabinet with common cathode, **960mm x 540mm x 39mm cabinet with common cathode, ***600mm x 337.5mm x 39mm cabinet

See how IMMERSIF microLED stack up compared to Flip Chip SMD and SMD.

Visible light spectrum / **Contrast** / Energy consumption

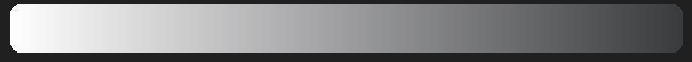
Aaztec IMMERSIF microLED - 10,000 : 1 *

1.4x



Aaztec Flip Chip SMD (Black Body) - 10,000 : 1 **

1.4x



Typical SMD - 6,000 : 1 ***

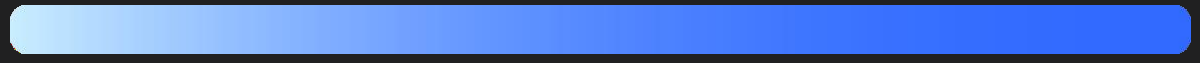
*600mm x 337.5mm x 39mm cabinet with common cathode, **960mm x 540mm x 39mm cabinet with common cathode, ***600mm x 337.5mm x 39mm cabinet

See how IMMERSIF microLED stack up compared to Flip Chip SMD and SMD.

Visible light spectrum / Contrast / **Energy consumption**

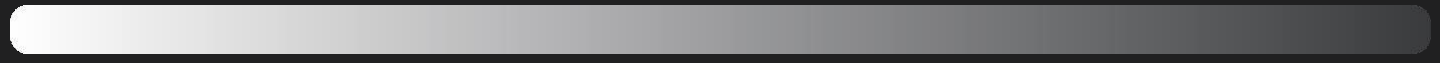
-17%

Aaztec IMMERSIF microLED P1.2mm - max 270 W/m² *



-17%

Aaztec Flip Chip SMD (Black Body) P1.2mm - max 270 W/m² **



Typical SMD P1.2mm - max 430 W/m² ***

*600mm x 337.5mm x 39mm cabinet with common cathode, **960mm x 540mm x 39mm cabinet with common cathode, ***600mm x 337.5mm x 39mm cabinet

We can do this all day.

IMMERSIF microLED has the **coolest surface temperature of a LED display ever.** That energy efficiency is the magic of common cathode. So wherever you can envision a LED display or whenever duty calls, run with it.

0.9mm Pixel Pitch

Low to

123 w/m²

Typical Power Consumption

1.2mm Pixel Pitch

Low to

90 w/m²

Typical Power Consumption

1.5mm Pixel Pitch

Low to

100 w/m²

Typical Power Consumption

1.8mm Pixel Pitch

Low to

103 w/m²

Typical Power Consumption

16

bit depth

600

nits peak brightness

3840

Hz refresh rate

10,000:1

contrast ratio

640,000

pixels/m^2*

*Claim refers to 600mm x 337.5mm x 39mm cabinet in P1.2mm

LED Binning

The next generation of versatility.

More advanced calibration architeture enables stunning colour clarity. With an in-house microLED manufacturing process that boasts enhanced individual LED colour matching and individual module calibration, the colour accuracy of IMMERSIF microLED has never been so precise. The result is a stunning gain in colour clarity that unlocks unparalleled versatility, empowering you to expand your screen real estate like never before.*

Aspect ratio - 16:9
Purchased - **3rd January, 2022**

Aspect ratio - 16:9
Purchased - **9th January, 2023**

*colour variations of up to 9% may occur between new and old modules, owing to the natural variance in age, hours of use, heat, and other external factors.

Edge-to-Edge
An infinity pool of pixels.

Enter a realm where black is more than just a colour - it's a canvas for pure visual excellence. With every IMMERSIF microLED module enveloped in a sumptuous, matte black coating, we've crafted a display that's as seamless as it is stunning. Every detail of your content is rendered with breathtaking depth and contrast, without any distracting white edges to detract from the immersive experience.

Conventional microLED

IMMERSIF microLED

Deep Black.

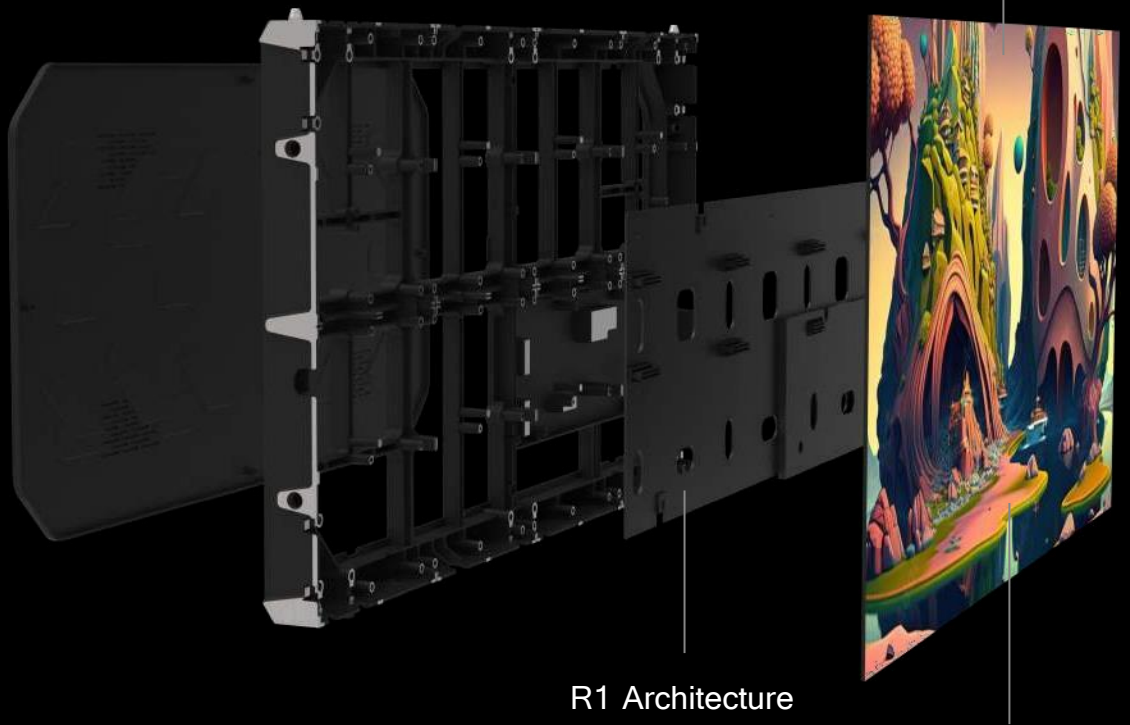
And made to stay that way.

Aaztec is dedicated to unleashing the full potential of visual excellence -and we do it by tapping into our expertise in specialized LED manufacturing and creating an ultra-rich, matte black coating. By fusing these technologies together, we've birthed a display that delivers consistent black levels so deep they will take your breath away.

Conventional microLED

IMMERSIF microLED

Innovation in every layer.



A1 Architecture. Seamlessly integrating the Nova star Armor series receiver card with our hub card and power supply, we have achieved an unprecedented level of performance and serviceability that pushes the boundaries of what's possible in the world of LED displays.

Up to
17%
more energy efficient
than typical SMD

Up to
30%
less surface heat
than typical SMD

Less glare.
And even less glare.

At Aaztec, we've engineered every IMMERSIF microLED with one thing in mind: the pursuit of image perfection. Our relentless attention to detail has led us to develop an anti-reflective coating that operates on the nanometer level, scattering light and minimizing glare to an unprecedented degree. Unlike traditional matte LED coatings that produce unwanted haze and lower contrast, our proprietary technology maintains perfect contrast while preserving the clarity and beauty of the image on the screen.

IMMERSIF microLED and Novastar. Dream team.

IMMERSIF microLED and the Armor series from Novastar have been crafted in tandem, with every detail meticulously designed to provide you with an immersive experience like no other. The automatic module calibration, precise grayscale adjustments, HDR10 with HLG capabilities, and minimal frame latency all work together seamlessly to transport you into a world of unparalleled visual immersion.

SPECIFICATIONS

Aaztec - IMMERSIF micro Led COB					
Physical Parameters	Model .No	AV0.9	AV1.2	AV1.5	AV1.8
	Pixel Pitch (mm)	0.9	1.2	1.5	1.8
	Cabinet Size (W x H x D) mm	600 x 337.5 x 39	600 x 337.5 x 39	600 x 337.5 x 39	600 x 337.5 x 39
	Cabinet Resolution (L x W) pixels	640 x 360	480 x 270	384 x 216	320 x 180
Optical Parameters	Brightness Uniformity	≥97 %	≥97 %	≥97 %	≥97 %
	Aspect Ratio	16:9	16:9	16:9	16:9
	View angle	160 H x160 V degree	160 H x160 V degree	160 H x160 V degree	160 H x160 V degree
	Brightness (nits = cd/m²)	≤600	≤600	≤600	≤600
	Contrast ratio	3000:1	3000:1	3000:1	3000:1
	Refresh Rate (Hz)	≤3,840	≤3,840	≤3,840	≤3,840
	Color Temperature (K)	2,500 ~ 10,000	2,500 ~ 10,000	500 ~ 10,000	2,500 ~ 10,000
	Features	Common Cathode	Common Cathode	Common Cathode	Common Cathode
	Power Consumption Max (W/m²)	≤370	≤270	≤300	≤310
	Power Consumption Typical (W/m²)	≤123	≤90	≤100	≤103
	Maintenance	Front services	Front Service	Front Service	Front Service
	Working Voltage	AC: 100 V~240V, 50~60 Hz	AC: 100 V~240V, 50~60 Hz	AC: 100 V~240V, 50~60 Hz	AC: 100 V~240V, 50~60 Hz
Additional Features	Lifetime (Hours)	100,000	100,000	100,000	100,000
	Operating Temp (C)	-20 ~ +60	-20 ~ +60	-20 ~ +60	-20 ~ +60
	Humidity Range (%)	10 ~ 80	10 ~ 80	10 ~ 80	10 ~ 80