

BERYL XR

EXTENDED REALITY RENTAL LED DISPLAY






OVERVIEW

The BERYL XR is the top notch Extended Reality oriented LED display. Available for indoor applications, it is designed to be easy to integrate into and to remove from any desired structure, making it an ideal choice for large audiovisual production sets that are more often than not temporary installations. Investing in the BERYL XR is a smart move for any company that deals with high end professional productions.




 APPLICATION
Indoor


 INGRESS PROTECTION
IP20


 PIXEL PITCH
P1.5 P1.9 P2.6


 DISPLAY AREA (W x H)
500 x 500 mm

 REFRESH RATE
7680 Hz

 BRIGHTNESS
≤ 1500 NITS MINILED 4IN1

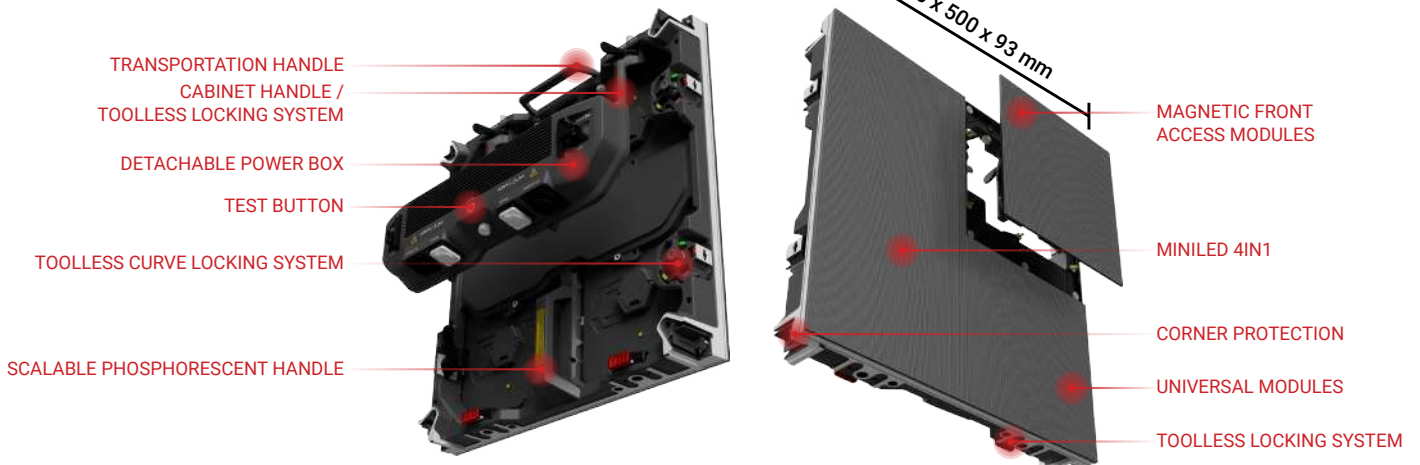
 WEIGHT
8.5 kg/cabinet

 MATERIAL
Anodized aluminum

 MAINTENANCE
Front & back maintenance



FEATURES



CUSTOMIZABLE INTEGRATION

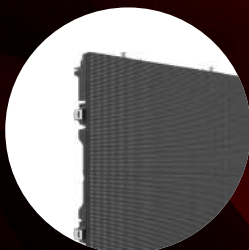
The BERYL XR supports several types of integration, as it can be hung from a ceiling, stacked on the floor or even affixed to a structure. It also provides a toolless curve locking system to fit tailored installations on the spot, can be integrated at 90° concave angles and is

both glare-resistant and scratch-resistant. These features make the BERYL XR easy to integrate and easy to displace, the same application can follow you all along your production process, saving you both time and money.

PERFORMANT XR ORIENTED LED DISPLAY

The top two requirements for an effective XR LED set are high resolution and a low scan rate. Our BERYL XR comes in P1.5, P1.9 & P2.6, fine pixel pitches compared to our competitors' XR LED screens. Moreover, the 7680 Hz refresh rate allows for a smooth calibration and synchronization of your LED display with

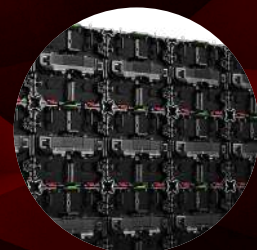
the cameras. While the quality of your renders will definitely show on this LED display, you can also rest assured your Extended Reality set will respond in real-time the camera and the actor's movements. Investing in the BERYL XR is the right choice if you want to get the best out of this technology.



FINE PIXEL PITCH
FOR XR USE



SUPPORTS MULTIPLE
INTEGRATION METHODS



EASY CABINETS
ASSEMBLY

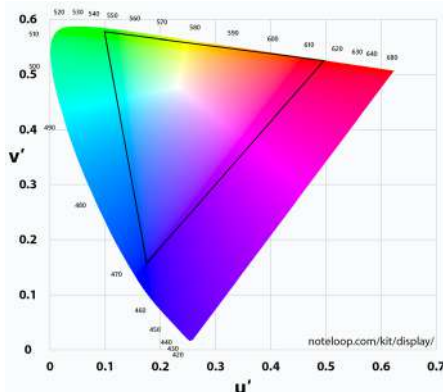
OPTIMIZED SCAN RATE

A LED display's scan rate is defined by the number of drivers compared to the number of integrated circuits. In principle, a single integrated circuit transmits a visual signal to a group of 16 LEDs, while a driver transmits the signal to a group of integrated circuits. By augmenting the number of drivers, you ensure a faster and more fluid signal transmission to all the LEDs that com-

pose your XR screen. This makes your refresh rate much higher and thus allows a better calibration for your XR LED screen. Built with Brompton Technology processors, the BERYL XR cabinets have a 1/10 scan rate with a P1.5 pitch and a 1/8 scan rate with P1.9 & P2.6 pitches. Thus, your XR scene can easily attain a 7680 Hz refresh rate.

MINILED 4IN1

The MiniLED 4in1 consists in 4 small LEDs encapsulated in the space that a normal SMD LED represents. This technology offers numerous advantages, but the most noteworthy are the tremendous gains in both image resolution and LED durability. The first one is quite self-explanatory, as you multiply the effective number of LEDs by 4 on your modules. The second one is due to the encapsulation, which works like the GME technology, but on the LED level rather than on the whole module. While adding to the LEDs resistance, it still allows a qualified technician to repair each MiniLED 4in1 individually, while this operation is almost impossible on a GME module.



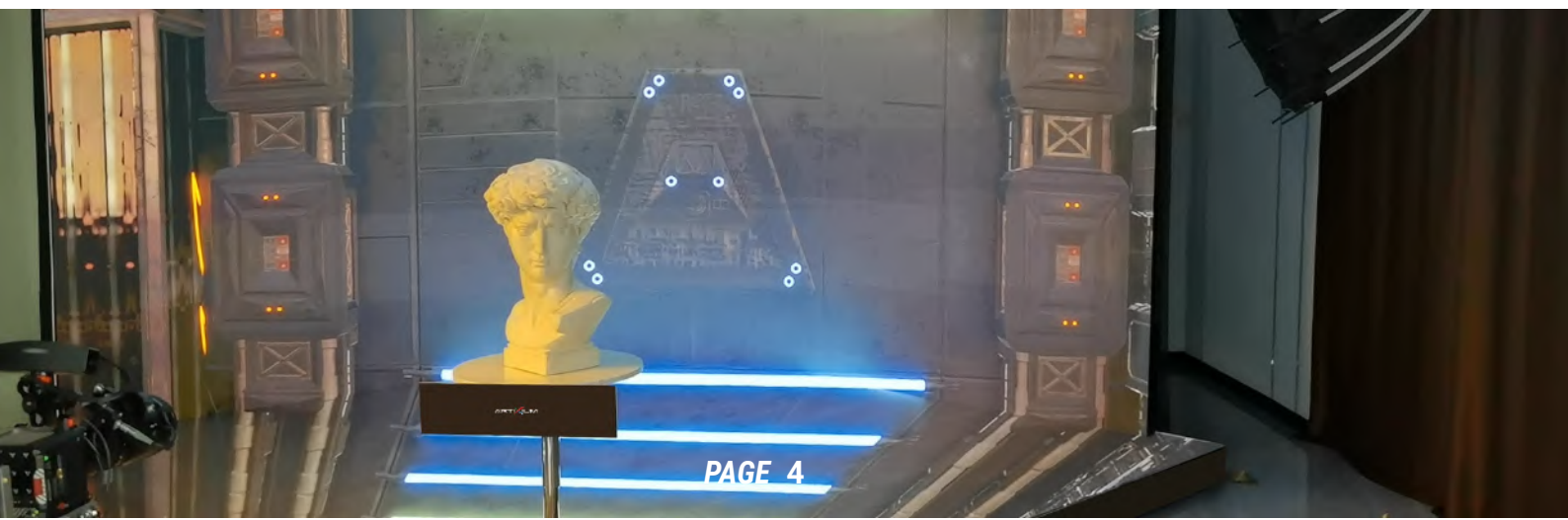
99.9% OF DCI-P3 GAMUT

Digital Cinema Initiatives (DCI) is an association of cinema production companies. The DCI-P3 color gamut, created to render real-life colors as faithfully as possible, covers 25% more of the colorimetric space than sRGB. Thanks to its MiniLED 4in1, the BERYL XR can reconstitute the quasi-integrity of this space, which is destined to become the new standard for digital displays.

HD PITCH

The P1.5, P1.9 & P2.6 pixel pitches are what are considered to be fine pitches, Ultra HD pitches even. You can indeed easily attain Ultra HD or 4K definition with a limited number of cabinets. This

feature is ideal for extended reality, where your scene's visual definition will be an obvious advantage for your different shootings.

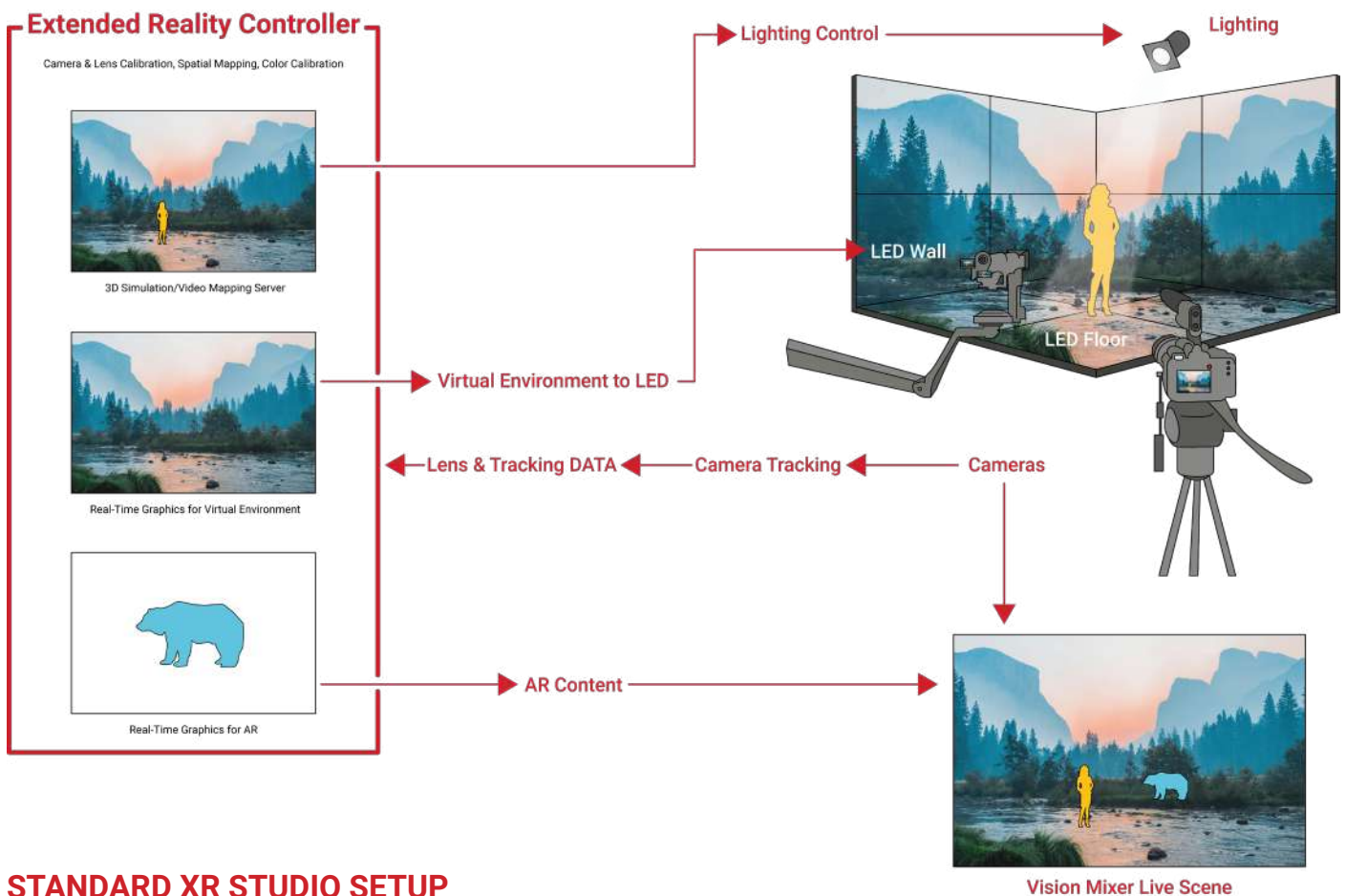




EXTENDED REALITY

Extended Reality (XR) is the combination of Augmented Reality (AR) and Mixed Reality (MR). AR places virtual imagery over a live background, while MR combines camera tracking and real-time rendering to create an immersive virtual environment, visible live on the LED set and shot on camera. With XR,

you can implement extremely complex visual effects to any audiovisual production, even live broadcast. You can use this technology in innumerable ways, as any media that uses cameras can upgrade to XR to further improve their audience's visual experience.



STANDARD XR STUDIO SETUP

THE NEXT GENERATION OF AUDIOVISUAL PRODUCTION

XR technology is becoming a solution of choice for numerous video productions. Its advantage over the traditional green screens and other visual effect methods is obviously the real-time reaction to the actors and cameras movements, that allows for a live broadcasting or a much more immersive filming set that can be

further enhanced during the post production process. An ever-growing number of television or cinema productions have already invested in this technology, for an astonishing result. Famous TV series "The Mandalorian" for instance is well known for its use of XR technology during the production process.



TEST RESULTS

BERYL XR P2.6 20221123

Report Type
Single Panel Report

Generated
23.11.2022-15:55

1574 Nits

Achievable Luminance at D65

91.6 %

Rec. 2020 Red Coverage

68.1 %

Rec. 2020 Green Coverage

83.6 %

Rec. 2020 Blue Coverage

Panel Details

Panel Type
BERYL XR Indoor P2.6

Panel Serial
1

Firmware Version
3.4.4 BETA1 r9

Pack Version
3.4.4 BETA1

Module Serials
1-1
1-2
1-3
1-4

Measurement Details

Batch
BERYL XR P2.6 20221123

Hydra
PTT14

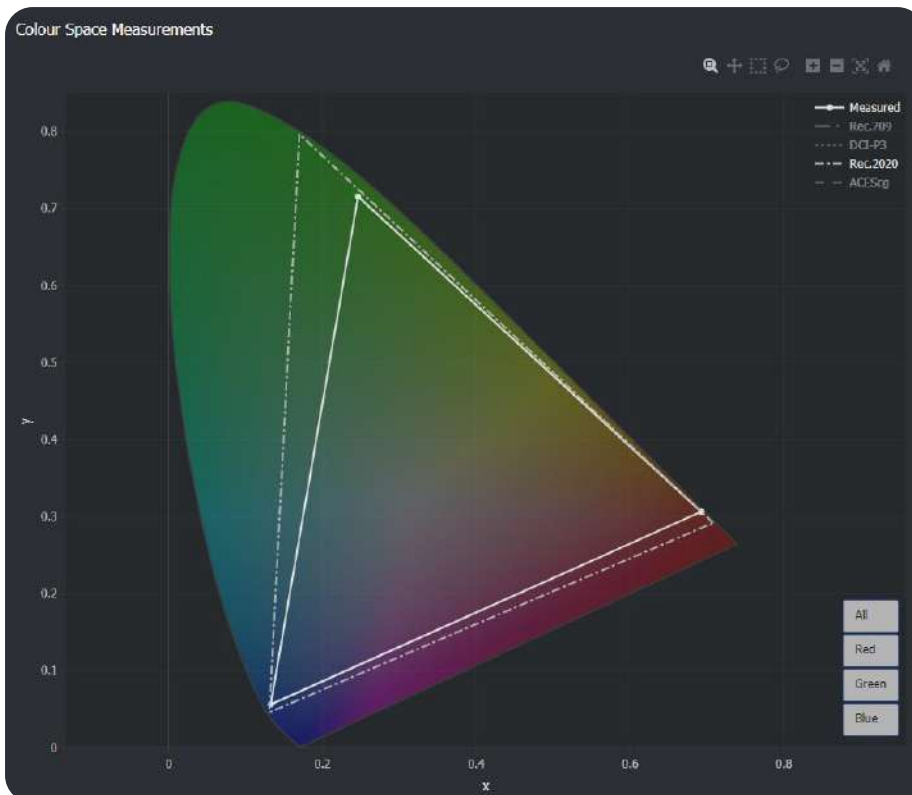
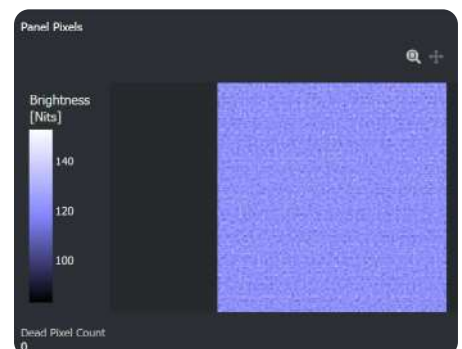
Measurement App Version
3.2.2 RC3

Measurement Date
23.11.2022-15:53

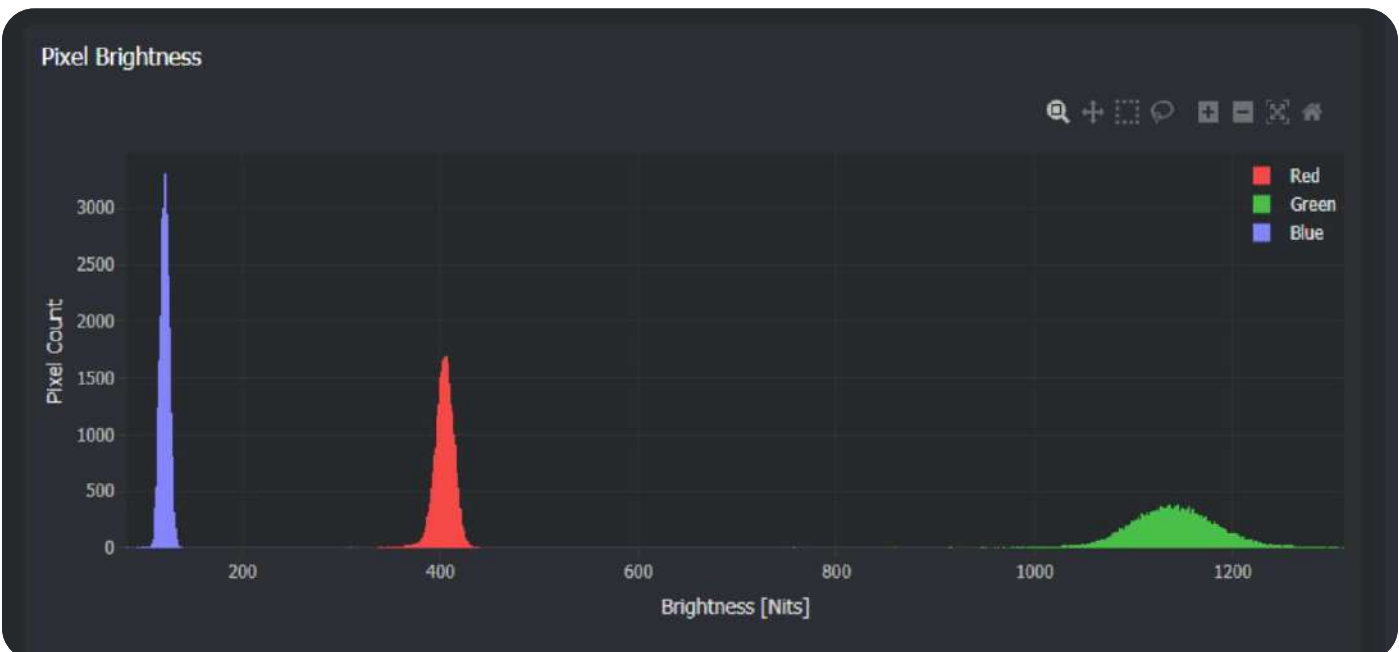


As a leader in the LED-oriented processing industry, Brompton Technology allows the production of the best XR LED screens. The different technical

specifications shown in this document are all corroborated by tests conducted with Brompton Technology's technical department.



	Coverage				White Point	Achievable Luminance
	Red	Green	Blue	Total		
Rec. 709	100%	100%	99.7%	99.9%		
DCI-P3	99.9%	100%	99.4%	99.8%	D65	1574 Nits
Rec. 2020	91.6%	68.1%	83.6%	80.4%		
ACEScg	87.9%	61.6%	81.5%	75.6%	ACES	1550 Nits



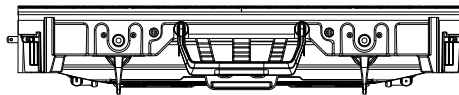
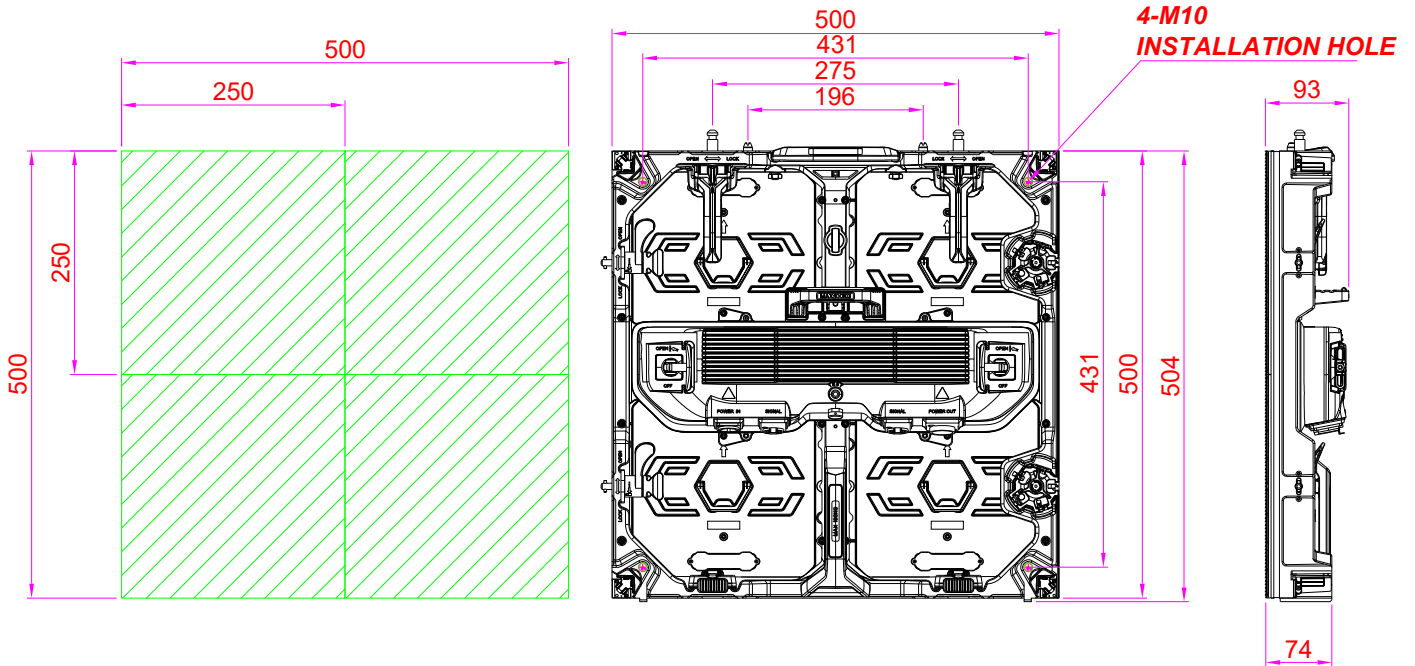


TECHNICAL SPECIFICATIONS

Product Parameters	Unit	INDOOR		
		1.5	1.9	2.6
Pixel Pitch	mm	1,56	1,95	2,60
LED		MiniLED 4in1		
Application		XR set LED application		
Ingress Protection	IP	IP20		
Brightness	cd/m ²	≤ 800 Nits @5volts	≤ 1000 Nits @5volts	≤ 1500 Nits @5volts
Color Temperature after calib (adjustable)	deg. K	6500		
Viewing Angle (50% brightness)	deg.	160 H / 140 V		
Cabinet Size (WxHxD)	mm	500 x 500 x 86		
Display area (WxH)	mm	500 x 500		
Module Size (WxHxD)	mm	250 x 250 x 15		
Pixel Matrix Per Cabinet (WxH)	px	320 x 320	256 x 256	192 x 192
Pixel Matrix Per Module (WxH)	px	160 x 160	128 x 128	96 x 96
Pixel Density	px/m ²	409600	262144	147456
Weight of cabinet and modules	kg	8.5		
Cabinet Material		Anodized aluminum		
Maintenance Mode		Front & Back		
Mask specification		95% Plastic + 5% Fiber / Clip type (no screws) / No Shaders		
Contrast Ratio		High		
Grey scale (linear)	bit	16		
Brightness control	bit	16		
Processing depth	bit	16		
Color		281 Trillions		
Scan Rate		1/10	1/8	
Display Refresh Rate	Hz	7680		
Operation Power	V	AC100-240V		
Max. Power Consumption	W/m ²	560	420	
Average Power Consumption	W/m ²	220	165	
Control Mode		Synchronization		
Video Frame Rate	Hz	50/60Hz		
Input Types Supported		S-video / VGA / DVI / SDI / HDMI		
3D ready (optional)		Yes		
Calibration		Yes		
Lifetime (50% brightness)	h	50000		
Operating Humidity Range		10-95%		
Operating Temperature Range		-20°C / +45°C		
Screen Uniformity Correction		Below 0.0001 (Out of Control point)		
Certification		CE / ETL / CCC		
Features		Corner Protection, Curve		
Compatibility		-		

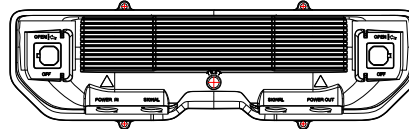


TECHNICAL DRAWINGS



Label and Label Position and size on the Power Box

Top View of Power Box



Label Position and size

Logo Position and size



Top View of Power Box



CONTACT

The Artixium regional branches are the key for the growth and development of our global network all over the world. Artixium's team is a spectrum of different nationalities and cultures, reflecting their global presence and mindset, mak-

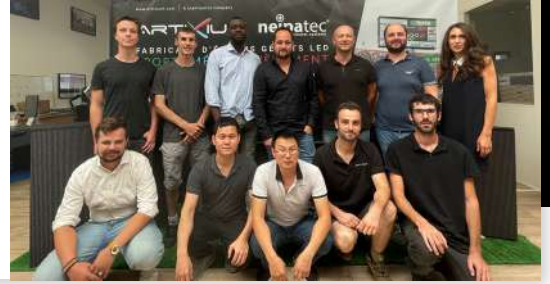
ing their communication smooth and hassle-free with clients from all around the world. Customer care, Innovation and flexibility has always been our values and we intend to keep this reputation for many years to come.

ARTIXIUM FRANCHISES

"From your project's conception to its completion."



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Since its creation in 2012 by two european entrepreneurs, Artixium has been evolving and always looking for innovative ways to contribute to the digital transition of our world. It only took a few years for Artixium to become a key player in the LED display industry.

www.artixium.com