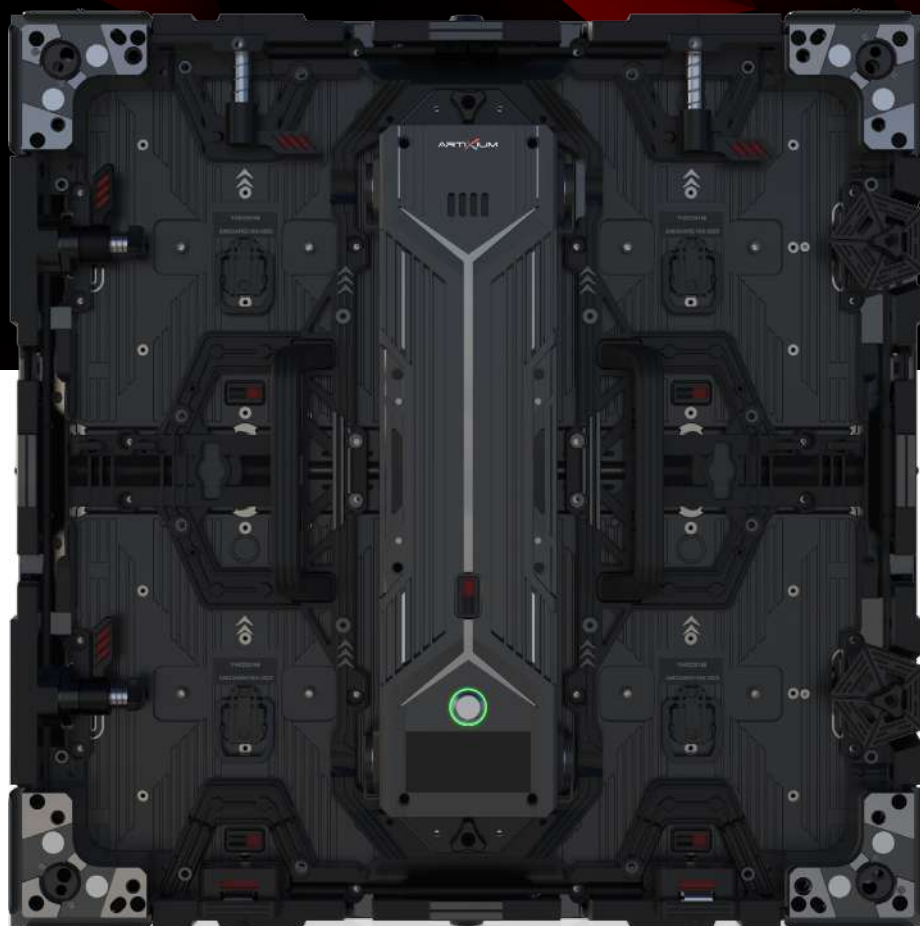


# MANGANITE

500

ULTRA HD MODULABLE LED CABINET





## OVERVIEW

Introducing the MANGANITE 500, our latest addition to the Ultra HD product line. This versatile product is suitable for both indoor and outdoor use and offers a range of customization options to adapt to various settings. With features like front and back maintenance, adjustable cabinet angles, and frame connectors, the MANGANITE 500 provides flexibility for your large LED displays.



**APPLICATION**  
Indoor / Outdoor



**INGRESS PROTECTION**  
IP40/IP20 (front/back - in.)  
IP65/IP54 (front/back - out.)



**PIXEL PITCH**  
P1.2 P1.5 P1.9 P2.5 (in.)  
P1.5 P1.9 P2.5 P2.9 P3.8 (out.)



**DISPLAY AREA (W x H)**  
500 x 500 mm



**REFRESH RATE**  
3840 Hz



**BRIGHTNESS**  
≤ 800 NITS (indoor)  
≤ 3500 NITS (outdoor)



**WEIGHT**  
9.2 kg/cabinet



**MATERIAL**  
Die-casting aluminum

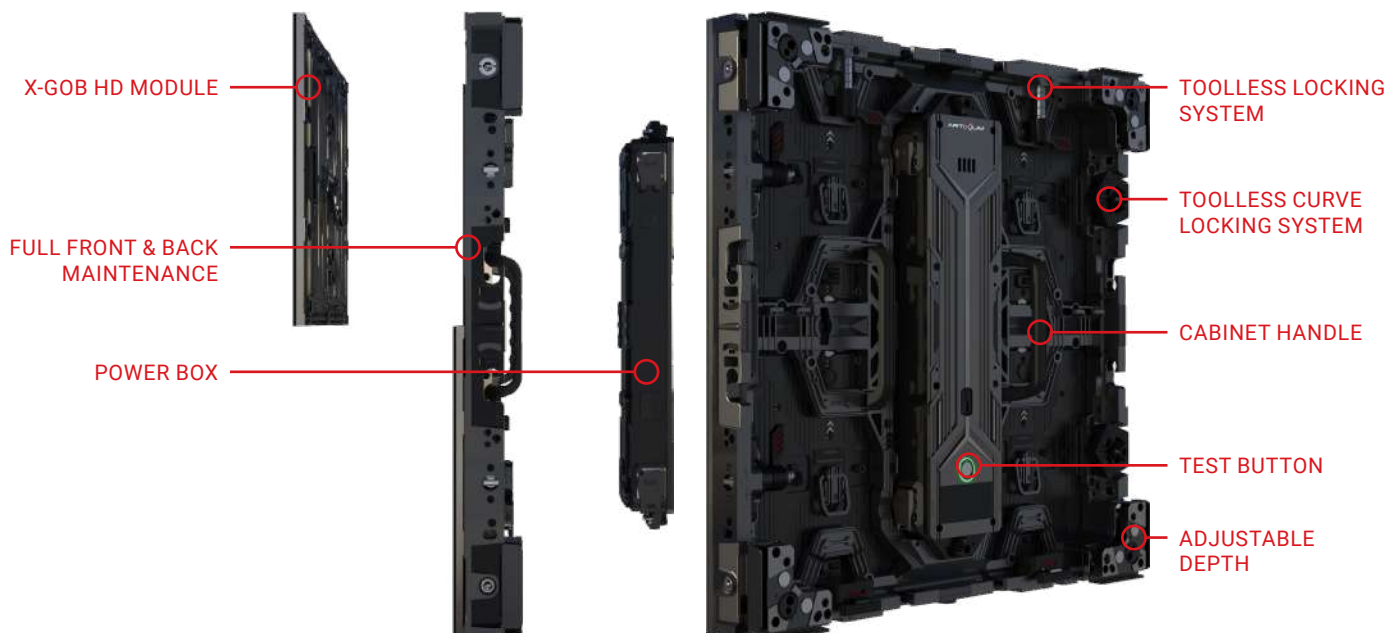


**MAINTENANCE**  
Front & back maintenance



## FEATURES

500 x 500 x 55.05 mm





## CUSTOMIZABLE INTEGRATION

The MANGANITE 500, designed for easy serviceability from both the front and back, offers the flexibility to be installed in various configurations with minimal maintenance concerns. Additionally, a range of optional accessories provides ample opportunities for creative integration.

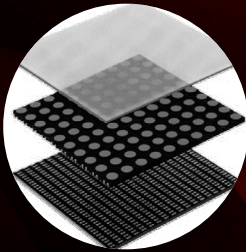


## X-GOB & MICRO X LEDS

Continuing the legacy of the PALLADIUM and IRIDIUM, the MANGANITE 500 achieves Ultra HD pixel pitch for both indoor and outdoor applications, thanks to its cutting-edge Micro X LEDs. These LEDs represent the latest in technology, featuring exceptional durability, high brightness, an extensive color range, anti-reflection treatment, and an impressive contrast ratio. Whether you

require an outdoor or indoor LED screen, the Micro X technology stands as the top-tier choice.

Furthermore, the modules are fortified with X-GOB technology, ensuring resilience against shocks, dust, water, temperature fluctuations, static electricity, while also enhancing contrast and prioritizing eye comfort.



MICRO X & X-GOB



CREATIVE APPLICATIONS



FLOOR OPTION

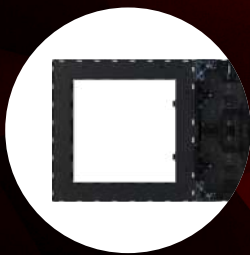


## ADJUSTABLE DEPTH

The MANGANITE 500's corner design enables you to fine-tune the cabinet depth, ranging from 55mm to 66mm, offering enhanced compatibility with your specific environment. The importance of this adjustable depth feature is often underestimated, but our extensive experience has shown us that it plays a crucial role in tailoring LED applications to your exact needs.

## MAINTENANCE

Both the modules and the power box of the MANGANITE 500 can be accessed from either the front or the rear of your installation. While the need to replace a malfunctioning module is infrequent, if required, it is a quick and straightforward process that can be completed in just a few minutes by a qualified technician.



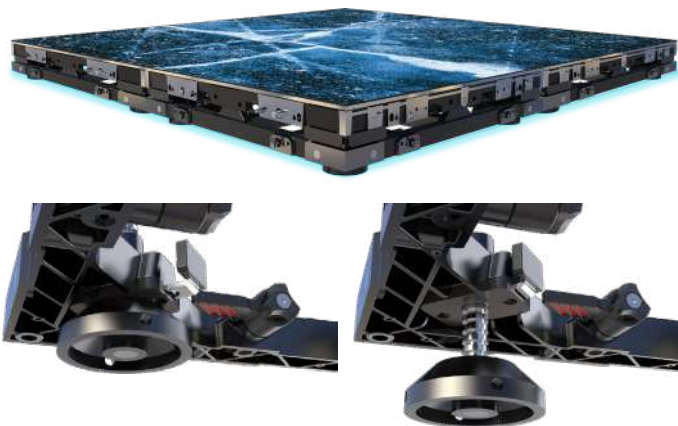
FRAME CONNECTORS



INWARD 90° CABINET



OUTWARD 90° CABINET

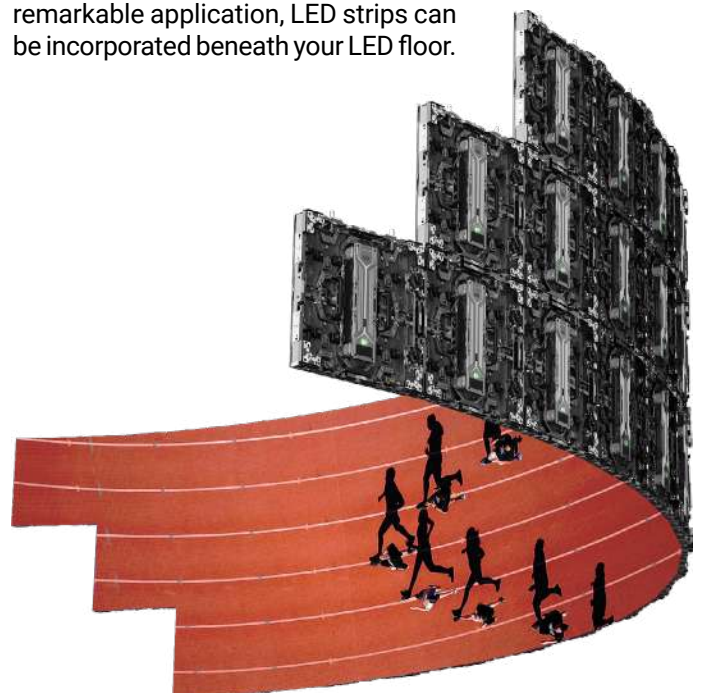


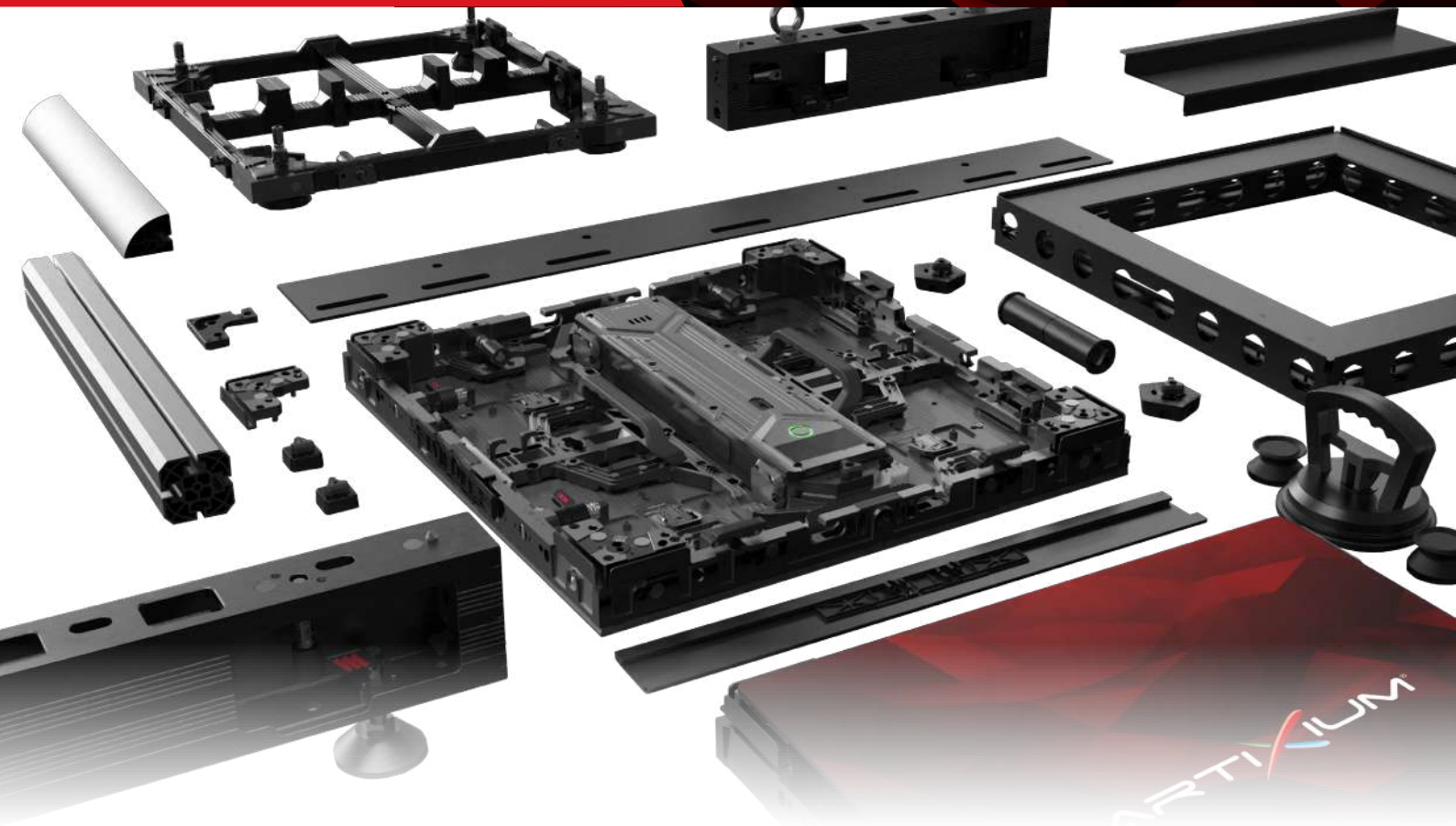
## FLOOR OPTION

The MANGANITE 500 offers the flexibility to be utilized as an LED floor, facilitated by its dedicated frame and adjustable feet. Additionally, for an even more remarkable application, LED strips can be incorporated beneath your LED floor.

## INTEGRATED CURVING SYSTEM

The MANGANITE 500 features a user-friendly toolless curve locking system, allowing for effortless installation on both inward and outward curves according to your preferences. This convenient feature enhances your creative freedom when designing your LED application.





## ACCESSORIES

The MANGANITE 500 offers a wide range of accessories, most of which are meticulously designed to enhance creativity and versatility for your project. These accessories are designed to cater

to various aspects of your project, enabling you to achieve the desired level of creativity and adaptability. Below is a list of these accessories, along with their potential benefits for your project



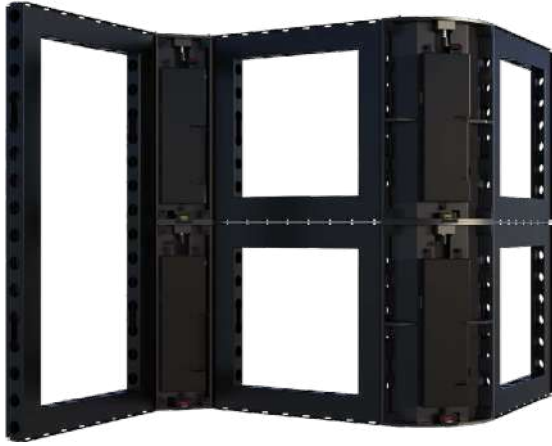
## ARTICULATED ARM

This accessory allows you to create tree-like applications by seamlessly connecting multiple individual MANGANITE 500 cabinets to any existing structure.

## FLOOR FRAME

This frame is essential for using your MANGANITE 500 as an LED floor, and it offers height adjustability for your convenience.





## FRAME CONNECTORS

These components enable you to create openings in your LED screen while preserving the connection between your LED cabinets.



## 90° CABINETS

Similar to the BERYL cabinets in our Event range, these cabinets allow you to achieve seamless 90° LED angles, and they offer the added advantage of being suitable for both inward and outward angles.



## FRONT STANDS

For exhibition purposes, we offer stands that can be securely attached to the front of your screen without causing any damage to the LEDs. This accessory is especially useful for product promotion and showcasing.



## HANGING BARS

The MANGANITE 500's hanging bars can also serve as floor stacking accessories, making them versatile enough to adapt to multiple application projects with a single accessory.



### TECHNICAL SPECIFICATIONS

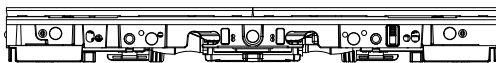
Product Parameters	Unit	INDOOR						OUTDOOR					
		1.2	1.5	1.9	2.6	2.9	3.9	1.2	1.5	1.9	2.5	2.9	3.9
Pixel Pitch	mm	1,23	1,56	1,95	2,60	2,98	3,91	1,23	1,56	1,95	2,60	2,98	3,91
LED		SMD1010			SMD1515			MicroX			SMD1921		
Application		Indoor Ultra HD touring LED cabinet						Outdoor Ultra HD touring LED cabinet					
Ingress Protection	IP	IP40 (front) / IP20 (back)						IP65 (front) / IP54 (back)					
Brightness	cd/m <sup>2</sup>	≤ 800 Nits @5volts						≤ 3000 Nits			≤ 3500 Nits @5volts		
Color Temperature after calib (adjustable)	deg. K	6500											
Viewing Angle (50% brightness)	deg.	160 H / 160 V											
Display Area (WxH)	mm	500 x 500 x 50											
Cabinet Size (WxHxD)	mm	500 x 500											
Module Size (WxHxD)	mm	250 x 250											
Pixel Matrix Per Cabinet (W x H)	px	408 x 408	320 x 320	256 x 256	192 x 192	168 x 168	128 x 128	408 x 408	320 x 320	256 x 256	192 x 192	168 x 168	128 x 128
Pixel Matrix Per Module (W x H)	px	204 x 204	160 x 160	128 x 128	96 x 96	84 x 84	64 x 64	204 x 204	160 x 160	128 x 128	96 x 96	84 x 84	64 x 64
Pixel Density	px/m <sup>2</sup>	665856	409600	262144	147456	112896	65536	665856	409600	262144	147456	112896	65536
Weight of cabinet	kg	9.2											
Cabinet Material		Die-casting aluminum											
Maintenance Mode		Front and back (tools required for front)											
Mask specification		X-GOB											
Contrast Ratio		High											
Grey scale (linear)	bit	16											
Brightness control	bit	16											
Processing depth	bit	16											
Color		281 Trillions											
Display Refresh Rate	Hz	3840											
Operation Power	V	AC100-240V											
Max. Power Consumption	W/m <sup>2</sup>	520						600			750		
Average Power Consumption	W/m <sup>2</sup>	208						240			300		
Control Mode		Synchronization											
Video Frame Rate	Hz	50/60Hz											
Input Types Supported		DVI / SDI / HDMI											
3D ready (optional)		Yes											
Calibration		Yes											
Lifetime (50% brightness)	h	50000											
Operating Humidity Range		10-95%											
Operating Temperature Range													
Screen Uniformity Correction		-											
Certification		CE / EMC / TUV-EMC / FCC / ETL / PSE / CCC / RoHS											
Available options		90° inward & outward cabinets, triangle cabinets, hanging bars/stacking systems, frame connectors											
Compatibility													



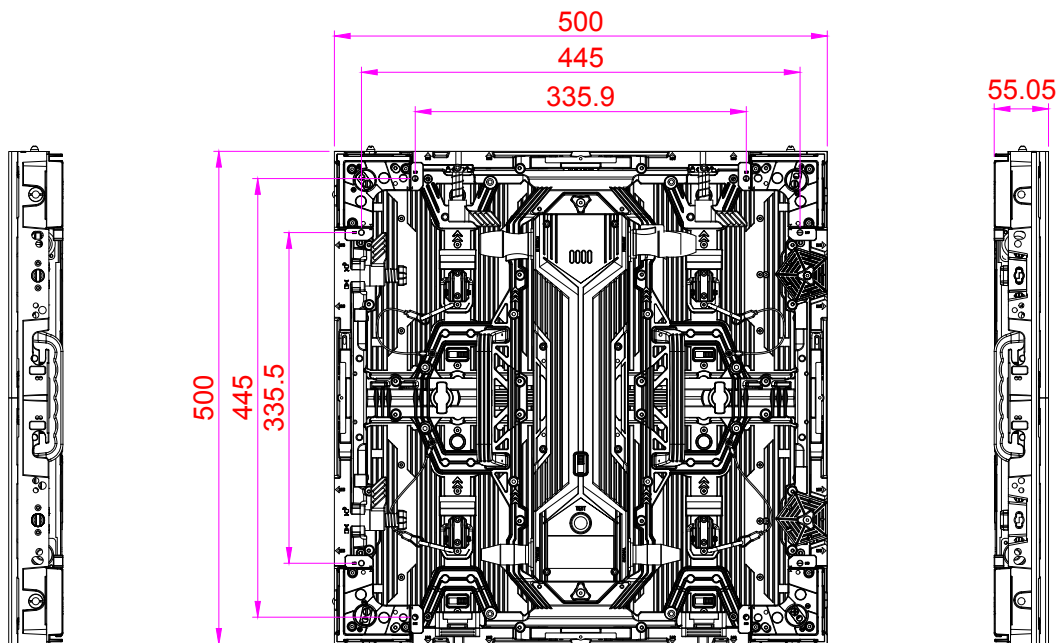
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## TECHNICAL DRAWINGS



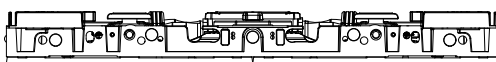
Top view



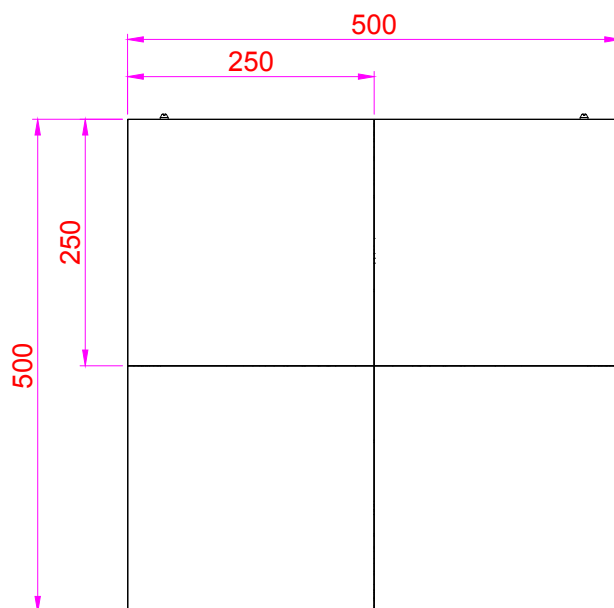
Left view

Rear view

Right view



Bottom view



Front view





# 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.

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[www.artixium.com](http://www.artixium.com)