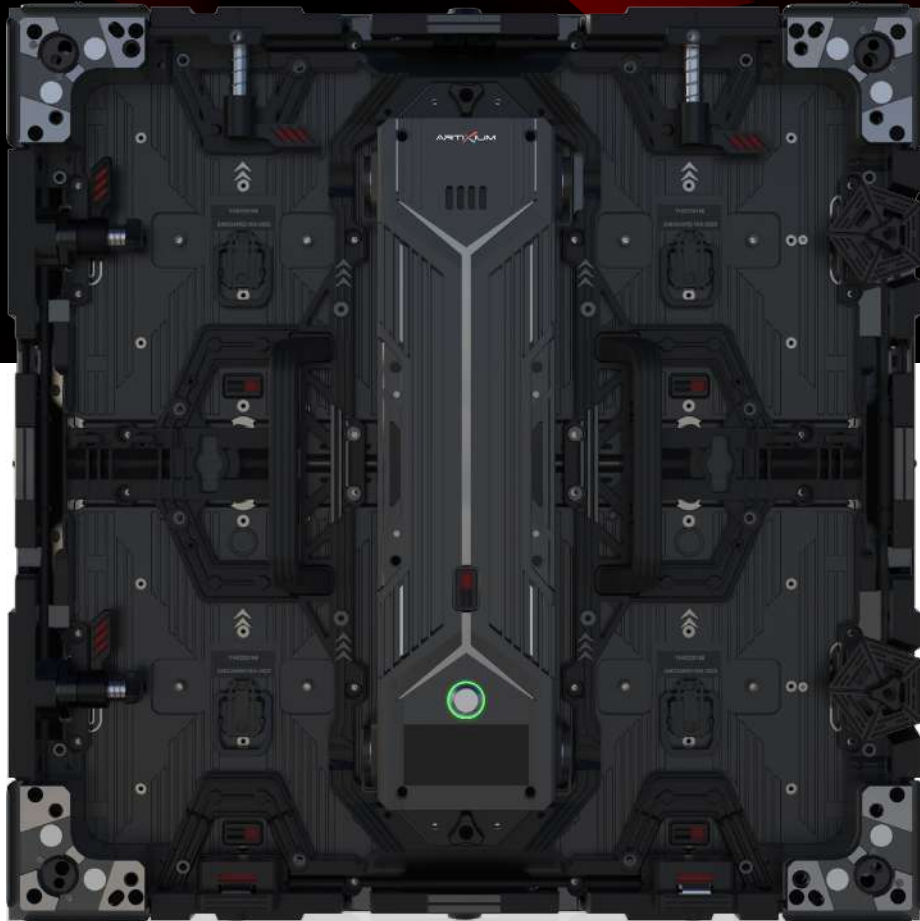# MANGANITE

## ULTRA HD MODULABLE LED CABINET

## OVERVIEW

Introducing the MANGANITE, 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 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 × H)**
**496 x 496 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

496 x 496 x 55 mm

X-GOB HD MODULE

FULL FRONT & BACK MAINTENANCE

POWER BOX

TOOLLESS LOCKING SYSTEM

TOOLLESS CURVE LOCKING SYSTEM

CABINET HANDLE

TEST BUTTON

ADJUSTABLE DEPTH

## CUSTOMIZABLE INTEGRATION

The MANGANITE, 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.
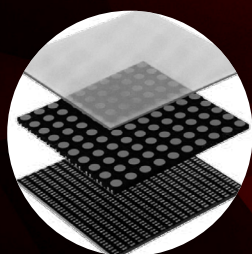
## X-GOB & MICRO X LEDS

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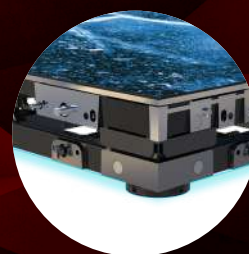
Furthermore, the modules are fortified with X-GOB technology, ensuring resilience against shocks, dust, water, temperature fluctuations, static electricity, while also enhancing contrast and prioritizing eye comfort.

**MICRO X & X-GOB**
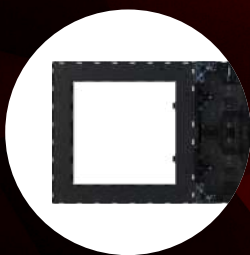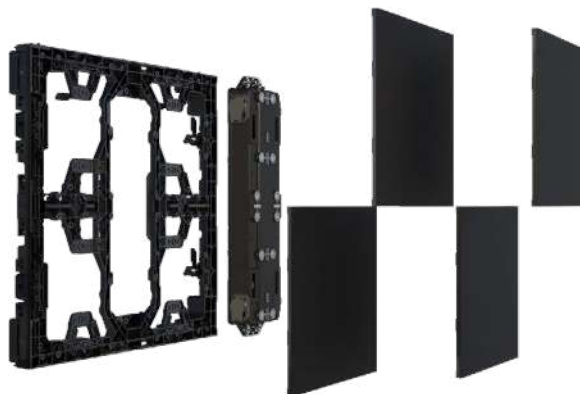
**CREATIVE APPLICATIONS**

**FLOOR OPTION**

## ADJUSTABLE DEPTH

The MANGANITE'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 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.
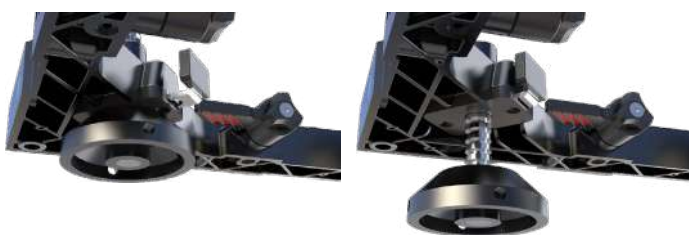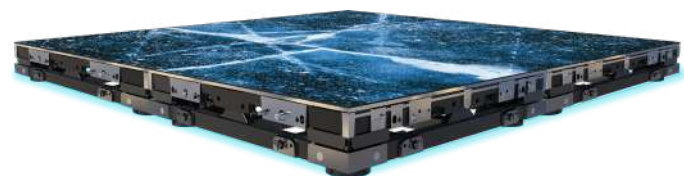


**FRAME CONNECTORS**

**INWARD 90° CABINET**

**OUTWARD 90° CABINET**

## FLOOR OPTION

The MANGANITE 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.
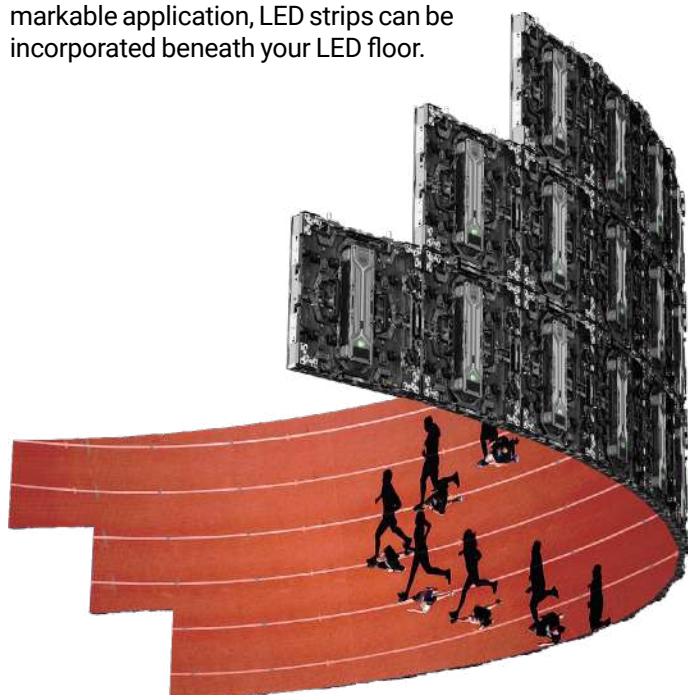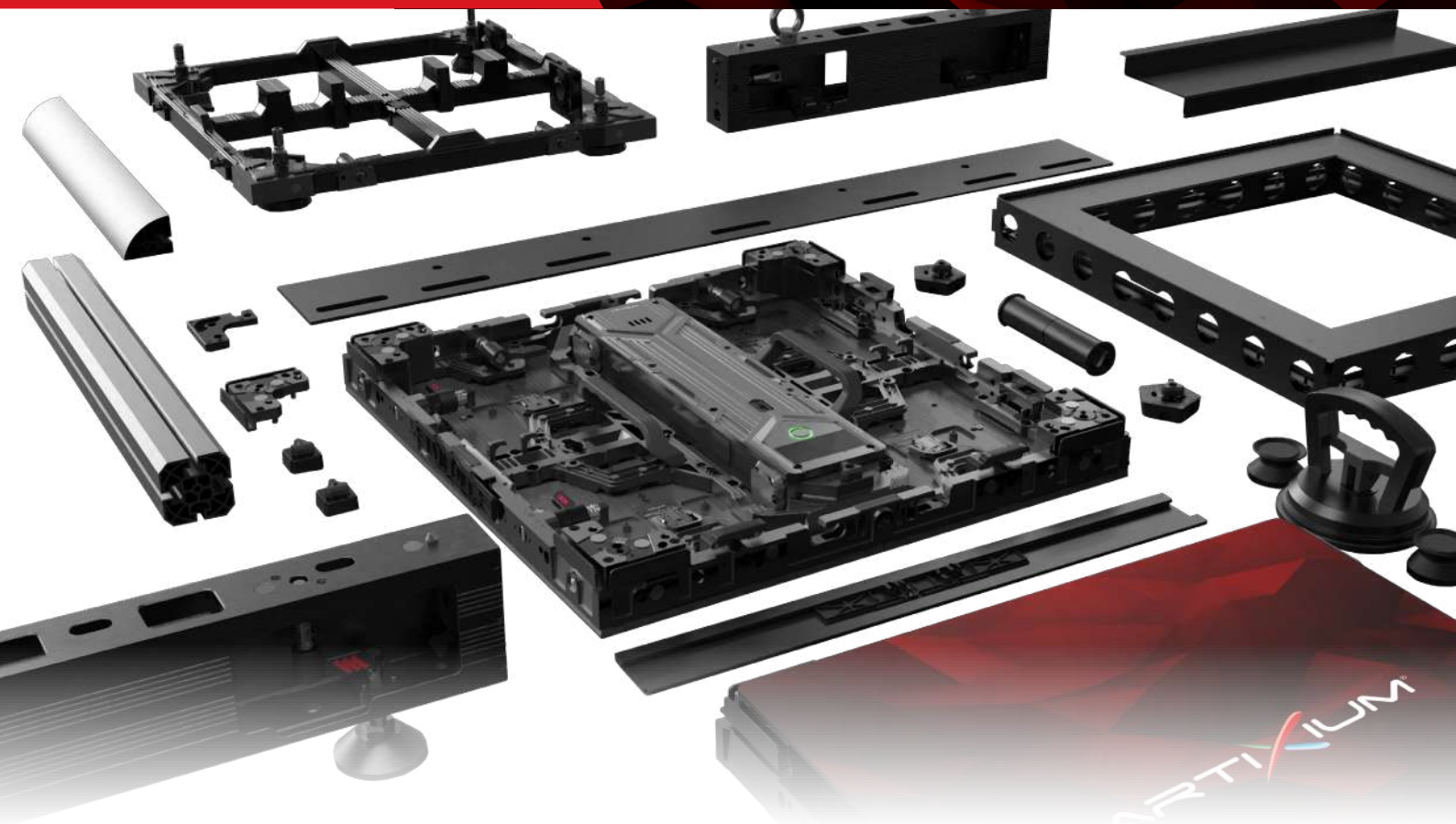
## INTEGRATED CURVING SYSTEM

The MANGANITE 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 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
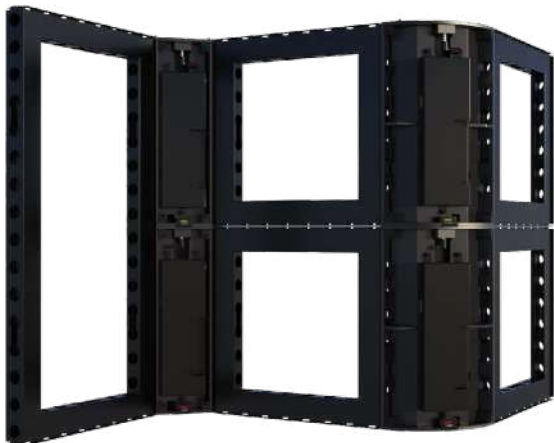


## ARTICULATED ARM

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

## FLOOR FRAME

This frame is essential for using your MANGANITE 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's hanging bars can also serve as floor stacking accessories, making them versatile enough to adapt to multiple application projects with a single accessory.
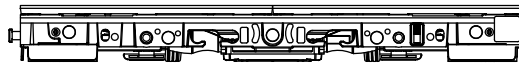
**FRONT & BACK MAINTENANCE HYBRID LED CABINET**
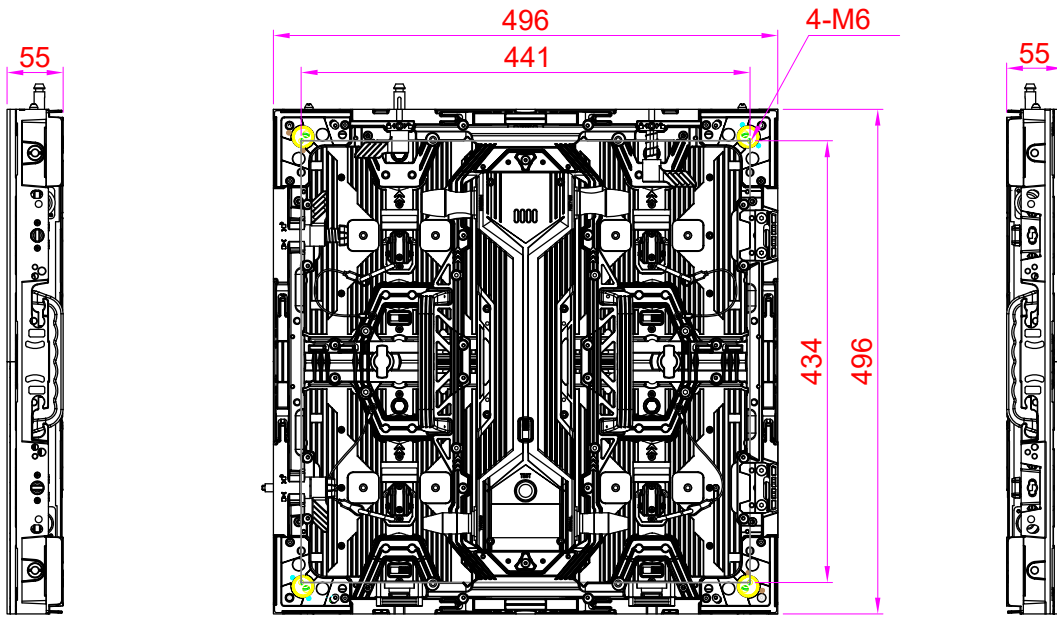
## TECHNICAL SPECIFICATIONS

| Product Parameters | Unit | INDOOR | | | | OUTDOOR | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 1.2 | 1.5 | 1.9 | 2.5 | 1.5 | 1.9 | 2.5 | 2.9 | 3.8 |
| Pixel Pitch | mm | 1,29 | 1,55 | 1,94 | 2,58 | 1,55 | 1,94 | 2,58 | 2,95 | 3,88 |
| LED | | SMD1010 | | | | MicroX | | | | SMD1921 |
| Application | | Indoor Rental HD LED Cabinet | | | | Outdoor Rental HD LED Cabinet | | | | |
| Ingress Protection | IP | IP40 (front) / IP20 (back) | | | | IP65 (front) / IP54 (back) | | | | |
| Brightness | cd/m² | ≤ 800 Nits @5volts | | | | ≤ 3500 Nits @5volts | | | | |
| Color Temperature after calib (adjustable) | deg. K | 6500 | | | | | | | | |
| Viewing Angle (50% brightness) | deg. | 160 H / 160 V | | | | | | | | |
| Display Area (WxH) | mm | 496 x 496 | | | | | | | | |
| Cabinet Size (WxHxD) | mm | 496 x 496 x 55 | | | | | | | | |
| Module Size (WxHxD) | mm | 248 x 248 | | | | | | | | |
| Pixel Matrix Per Cabinet (W x H) | px | 384 x 384 | 320 x 320 | 256 x 256 | 192 x 192 | 320 x 320 | 256 x 256 | 192 x 192 | 168 x 168 | 128 x 128 |
| Pixel Matrix Per Module (W x H) | px | 192 x 192 | 160 x 160 | 128 x 128 | 96 x 96 | 160 x 160 | 128 x 128 | 96 x 96 | 84 x 84 | 64 x 64 |
| Pixel Density | px/m² | 599376 | 416233 | 266389 | 149844 | 416233 | 266389 | 149844 | 114724 | 66597 |
| 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/m² | 600 | | | | 600 | | | 800 | |
| Average Power Consumption | W/m² | 240 | | | | 240 | | | 320 | |
| 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 | | all different sizes compatible with each other | | | | | | | | |

## TECHNICAL DRAWINGS

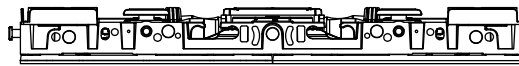Top view

Right view
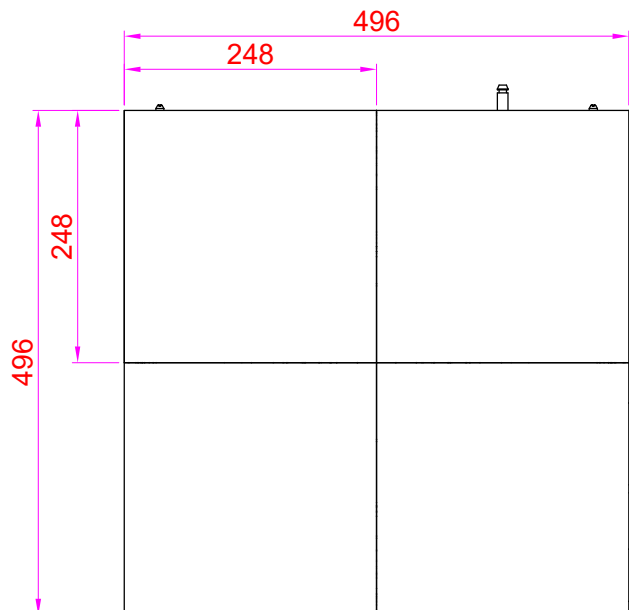
4-M6

496

441

434

496

55

55

Rear view

Left view

Bottom view

496

248

248

496

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, making 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.

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

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# ARTIXIUM®

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