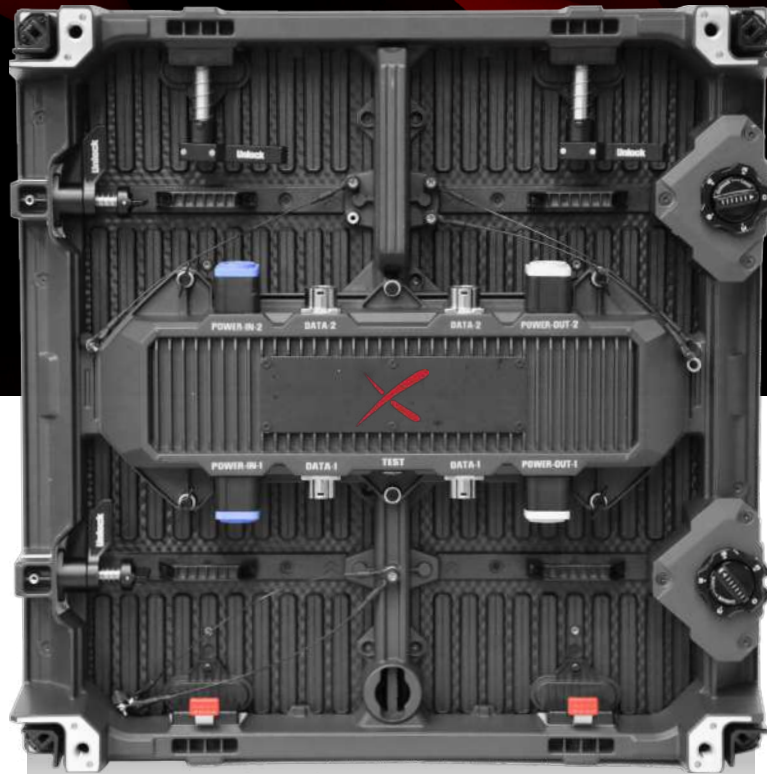# NICKEL XR

EXTENDED REALITY STUDIO LED DISPLAY

OVERVIEW

The NICKEL XR is our response to the ever-expanding range of use brought by the Extended Reality (XR) technology. Soon, the XR studios will replace the green screens found on many sets, which is the next logical step in audio-visual broadcasting. The NICKEL XR is a high-end LED display, modulable enough to fit perfectly your custom XR studio project, and its features were designed to match this technology's requirements.

APPLICATION
Indoor

INGRESS PROTECTION
IP30

PIXEL PITCH
P2.6

DISPLAY AREA (W x H)
500 x 500 mm
500 x 1000 mm

BRIGHTNESS
≤ 1000 NITS (LED TYPE SMD)

WEIGHT
7.5 - 11.5 kg/cabinet

MATERIAL
Die-casting aluminum

MAINTENANCE
Front & back maintenance

FEATURES

500 x 500 x 93 mm

TOOLLESS LOCKING SYSTEM

POWER BOX

CURVE LOCKING SYSTEM

ERGONOMIC TRANSPORTATION HANDLE

HEAT DISSIPATION DESIGN

DIE CASTING ALUMINUM FRAME

CURVE LOCKING SYSTEM
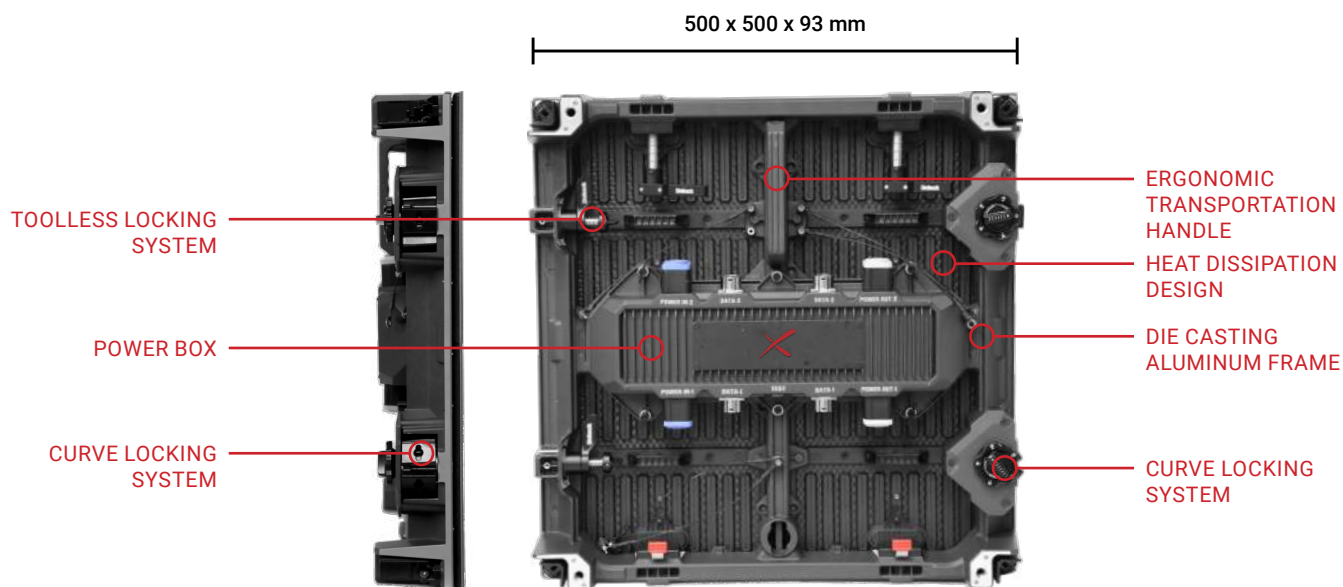
BROMPTON TECHNOLOGY VIDEO PROCESSING

Brompton Technology is the leader in the video processing system industry for LED screens, which is why we chose to integrate their processor into the NICKEL XR. Synchronization is very imp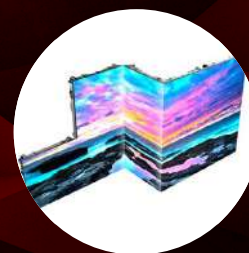ortant in Extended Reality, you can't afford to have any delay or your virtual set won't respond in real-time to the actor's and cameras' movements. The NICKEL XR allows for an undelayed reaction thanks to the Brompton Technology processors.


FRONT & BACK MAINTENANCE

3° AND 6° CONCAVE & CONVEX ANGLES SUPPORTED

**90° CONCAVE OR CONVEX ANGLE (CONVEX : ON DEMAND)**

EASY AND DURABLE INTEGRATION

The NICKEL XR is conceived to be light, resistant, and practical. The cabinets can be locked together without tools, and once affixed to your structure they won't move an inch. Maintenance is very convenient, as each module can be replaced individually very quickly, from the front or the back.
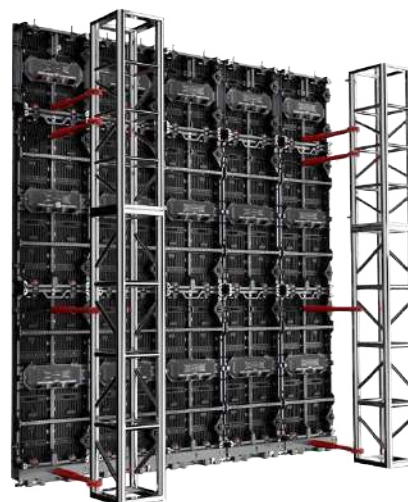
FIT FOR TAILORED PROJECTS

The NICKEL XR comes in two different sizes, compatible with each other. Each cabinet has a vertical curve locking system (from 3° to 6°, concave or convex) that allows you to create your custom XR set up. You can also place two cabinets at a concave 90° angle without modification, and we offer specially cut cabinets to create 90° convex angles.
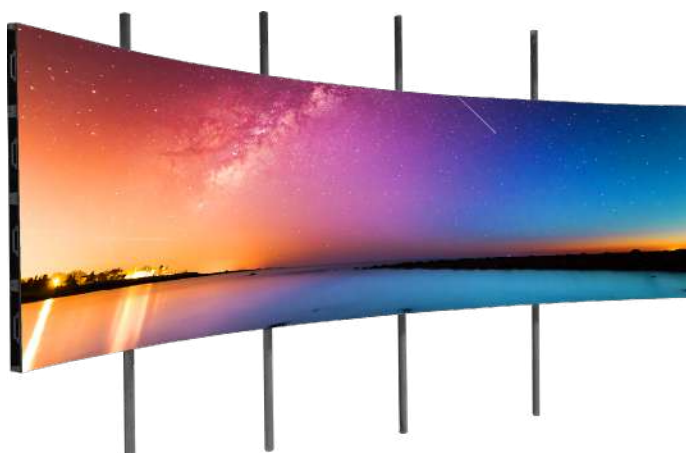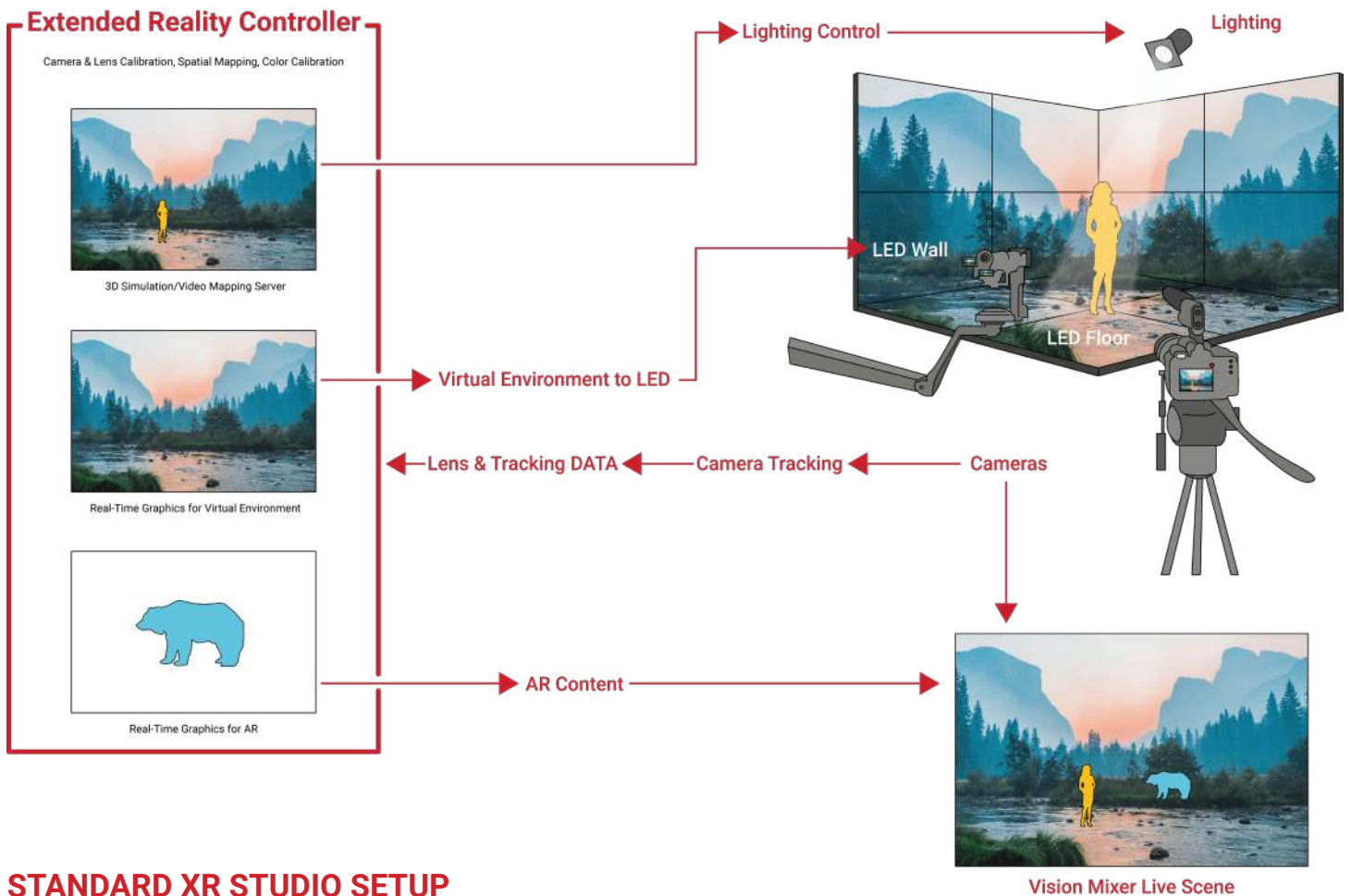
EXTENDED REALITY

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 audio visual 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 experience.

Extended Reality Controller

Camera & Lens Calibration, Spatial Mapping, Color Calibration

3D Simulation/Video Mapping Server

Real-Time Graphics for Virtual Environment

Real-Time Graphics for AR

Virtual Environment to LED

Lens & Tracking DATA ← Camera Tracking ← Cameras

AR Content

Lighting Control → Lighting

LED Wall

LED Floor

Vision Mixer Live Scene

STANDARD XR STUDIO SETUP

PERFECT LED DISPLAY FOR XR

The top two requirements for an effective XR LED set are high resolution and high refresh rate. Our NICKEL XR comes in P2.6, which is the finest pixel pitches on the market for this use, and we use Brompton Technology video processing systems to offer an astonishing 7680Hz refreshing rate, allowing a perfect calibration of your LED display with your cameras. While the quality of your renders will definitely show on this LED display, rest assured, your Extended Reality set will respond in real-time to the camera and the actor's movements. Investing in the NICKEL XR is the best choice if you want to get ahead of this developing technology.

TECHNICAL SPECIFICATIONS

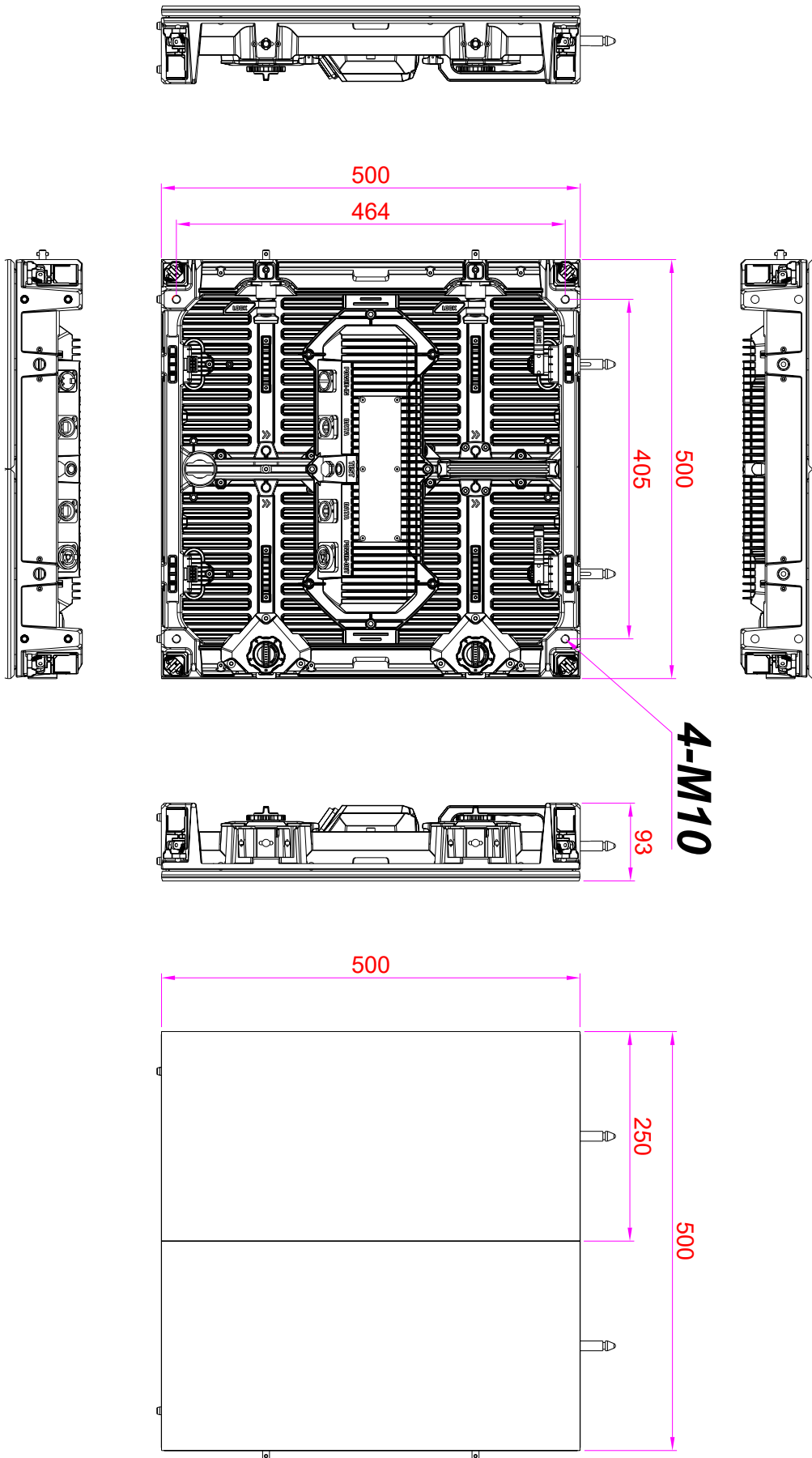| Product Parameters	Unit	INDOOR 2.6
Pixel Pitch	mm	2,60
LED		SMD1515
Application		XR Set LED application
Ingress Protection	IP	IP30
Brightness	cd/sqm	≤ 1000 NITS @5volts
Color Temperature after calib (adjustable)	deg. K	6500
Viewing Angle (50% brightness)	deg.	140°/140°
Cabinet Size (WxHxD)	mm	500 x 500 x 93 / 500 x 1000 x 93
Display area (WxH)	mm	500 x 500 / 500 x 1000
Module Size (WxHxD)	mm	250 x 250 x 15
Pixel Matrix Per Cabinet (WxH)	px	192 x 192 / 192 x 384
Pixel Matrix Per Module (WxH)	px	96 x 96
Pixel Density	px/sqm	147456
Weight of cabinet and modules	kg	7.5 / 11.5
Cabinet Material		Magnesium die-casting
Maintenance Mode		Front and Back
Mask specification		95% Plastic + 5% Fiber / Magnet (no screws) / no shaders
Contrast Ratio		High
Grey scale (linear)	bit	16
Brightness control	bit	16
Processing depth	bit	16
Color		281 Trillions
Display Refresh Rate	Hz	7680
Operation Power	V	AC 90-264V
Max. Power Consumption	W/sqm	450
Average Power Consumption	W/sqm	150
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		-20°C~+50°C
Operating Temperature Range		10%~80%RH
Screen Uniformity Correction		Less than 0.0001 (non-control point)
Certification		CE / ETL / CCC
Features		Convex 90° angle, curve locking system
Compatibility		Yes

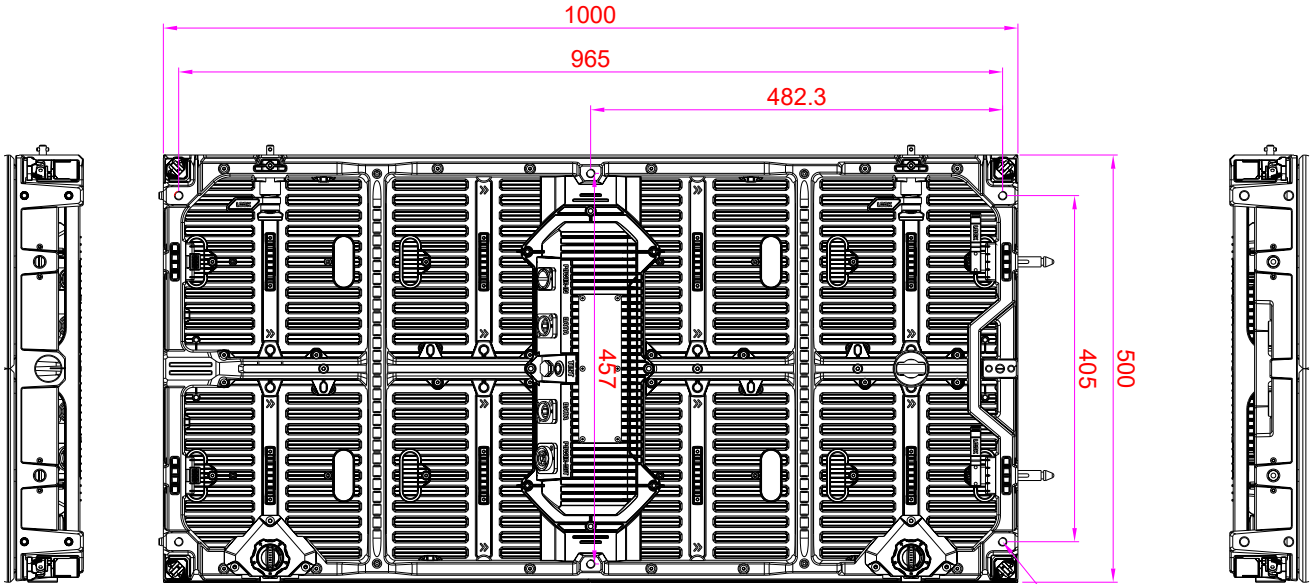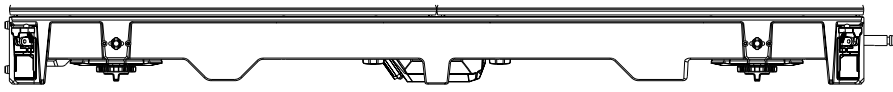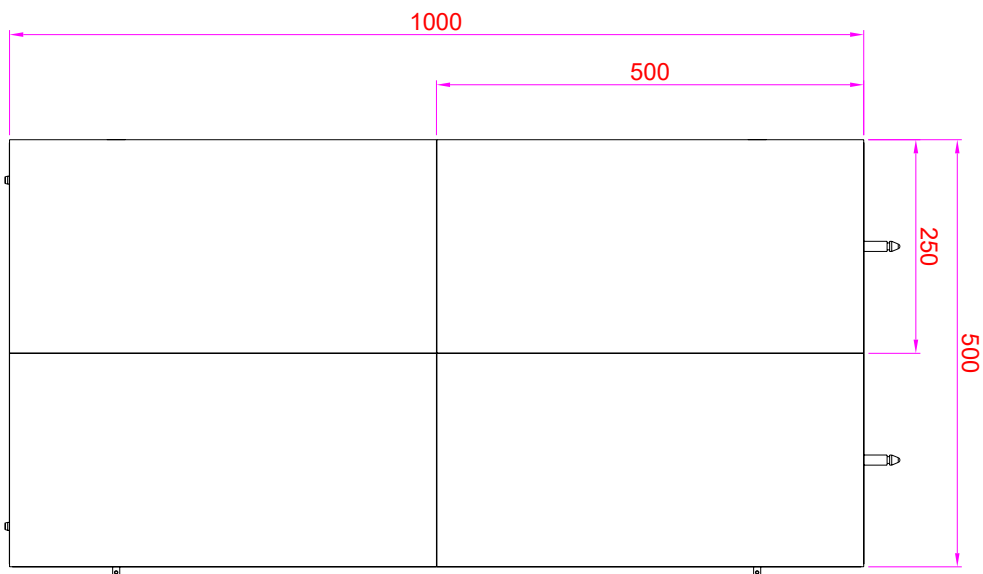## 500 X 500 X 93 MM

4-M10

500 X 1000 X 93 MM

6-M10

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.

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

ARTIXIUM
FRANCE

112 Avenue Franklin Roosevelt
69120 Vaulx-en-Velin
France
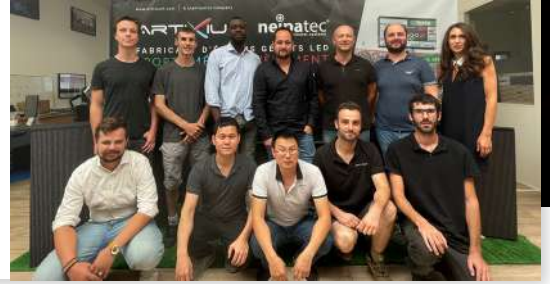
ARTIXIUM
CHINA

Artixium Operational Center
518000 Shenzhen
China

ARTIXIUM
GERMANY

Weissensteinstrasse 90b,
46149 Oberhausen
Germany

ARTIXIUM
TURKEY

Merkez Mah. Baglar Cad. A
Blok Apt. No: 14D/13 Kagithane, Istanbul
Turkey

🌐 **www.artixium.com**

📞 **0 428 001 801**

in **linkedin.com/company/artixium**

🐦 **twitter.com/artixium**

✉ **contact@artixium.com**

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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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