



# QWARTZ 3.0

MODULABLE LED SCREEN - ULTRA FINE PITCH



ARTIXIUM<sup>®</sup>

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## OVERVIEW

Discover the latest evolution of our QWARTZ range with the new QWARTZ 3.0. Following in the footsteps of its predecessors, this front-maintenance LED cabinet has been specifically designed for high-end indoor applications, while integrating the latest advances in LED technology.

Engineered to offer the perfect balance between image quality, installation flexibility and ease of operation, the QWARTZ 3.0 is intended for demanding projects requiring a reliable, elegant LED solution perfectly suited to indoor environments.



APPLICATION  
**Indoor**



INGRESS PROTECTION  
**IP20**



PIXEL PITCH  
**P1.5 P1.9 P2.6**



DISPLAY AREA (W x H)  
**250 x 250 / 500 x 250 / 750 x 250 / 1000 x 250 / 250 x 500 / 500 x 500 / 750 x 500 mm / 1000 x 500**



BRIGHTNESS  
**≤ 600 NITS @5volts (P1.5)  
≤ 1000 NITS @5volts**



WEIGHT  
**± 17.4 kg/m<sup>2</sup>**



MATERIAL  
**Die-casting aluminum**

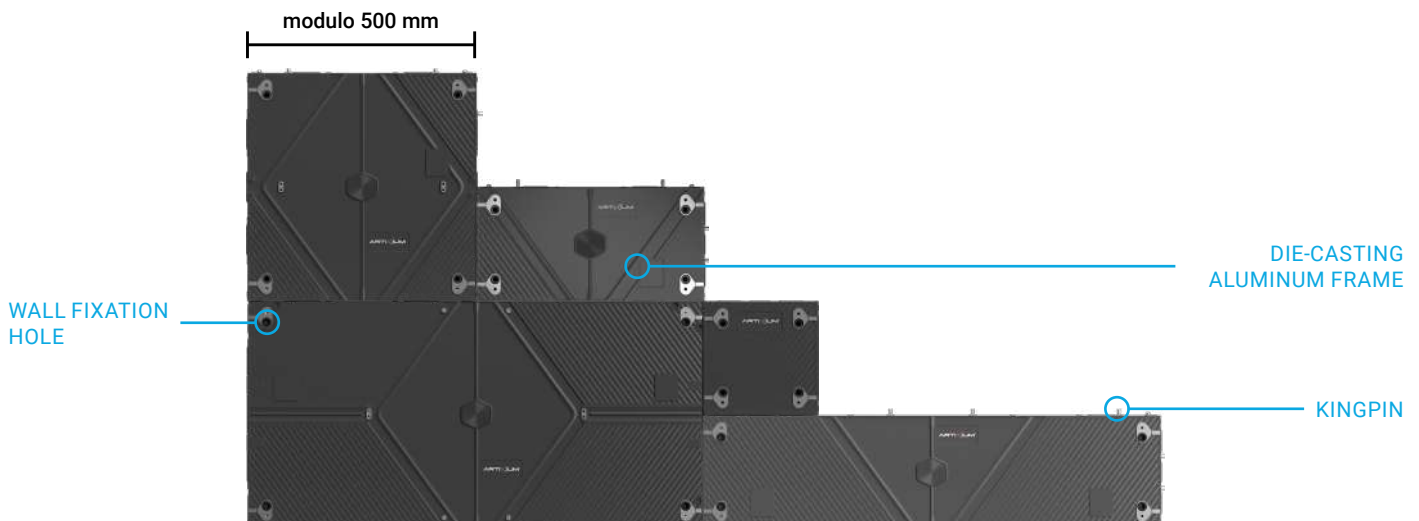


MAINTENANCE  
**Front maintenance**



## FEATURES

Eight different cabinet sizes are available and are all compatible with one another. These cabinets can be installed both vertically and horizontally.



## IMPROVED MODULARITY

To adapt to a wide variety of configurations, the QWARTZ 3.0 is available in several cabinet sizes: 250 x 250 mm, 500 x 250 mm, 750 x 250 mm, 1000 x 250 mm, 250 x 500 mm, 500 x 500 mm, 750 x 500 mm and 1000 x 500 mm.

This wide range of dimensions makes it possible to design LED displays that are precisely tailored to the architectural constraints of each project, while maintaining consistent installation and maintenance logic.

The QWARTZ 3.0 also includes quarter-circle cabinets, enabling refined screen finishes, rounded corners and more creative display designs. For applications requiring clean and precise

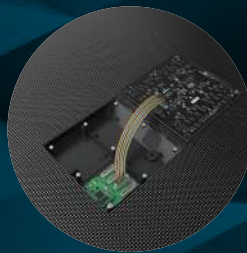
right angles, 45° bevelled cabinets are also available.

A comprehensive range of installation accessories further enhances this native modularity, offering greater integration freedom: hanging bars, wall-mounting brackets and dedicated fixing solutions adapted to various project configurations.

One of the major innovations of the QWARTZ 3.0 lies in its universal modules and cabinets, allowing 90° rotation. As a result, a 1000 x 500 mm cabinet can be used in a 500 x 1000 mm configuration, without compromising colour consistency or the visual continuity of the display.



45° BEVELLED CABINETS



FRONT ACCESS  
MAGNETIC MODULES



MAXIMUM MODULARITY



## HOB OPTION

On the P1.9 and P2.6 versions, the QWARTZ 3.0 can optionally integrate HOB – Hotmelt On Board technology. More robust than a traditional GOB treatment, this hotmelt encapsulation provides enhanced protection for LED modules against impacts, humidity and everyday wear.

In addition to improving display durability, the HOB treatment helps preserve excellent visual clarity. It also enables deeper blacks and smoother colour diffusion, significantly enhancing the overall perception of the image.

This option is therefore particularly relevant for indoor installations requiring both fine image rendering and increased resistance.

## SIMPLIFIED FRONT MAINTENANCE

The QWARTZ 3.0 has been designed to provide full front maintenance, making technical interventions easier even when the display is installed against a wall or integrated into a constrained environment.

Its LED modules are magnetically attached to the cabinets, allowing them to be quickly removed using a dedicated maintenance tool, without dismantling the structure or requiring rear access to the display. This design significantly reduces on-site intervention time, simplifies module replacement and improves overall operational efficiency.



Thanks to this intuitive front-maintenance design, the QWARTZ 3.0 is perfectly suited to permanent installations, indoor LED walls and architectural projects requiring a solution that is elegant, accessible and easy to maintain.

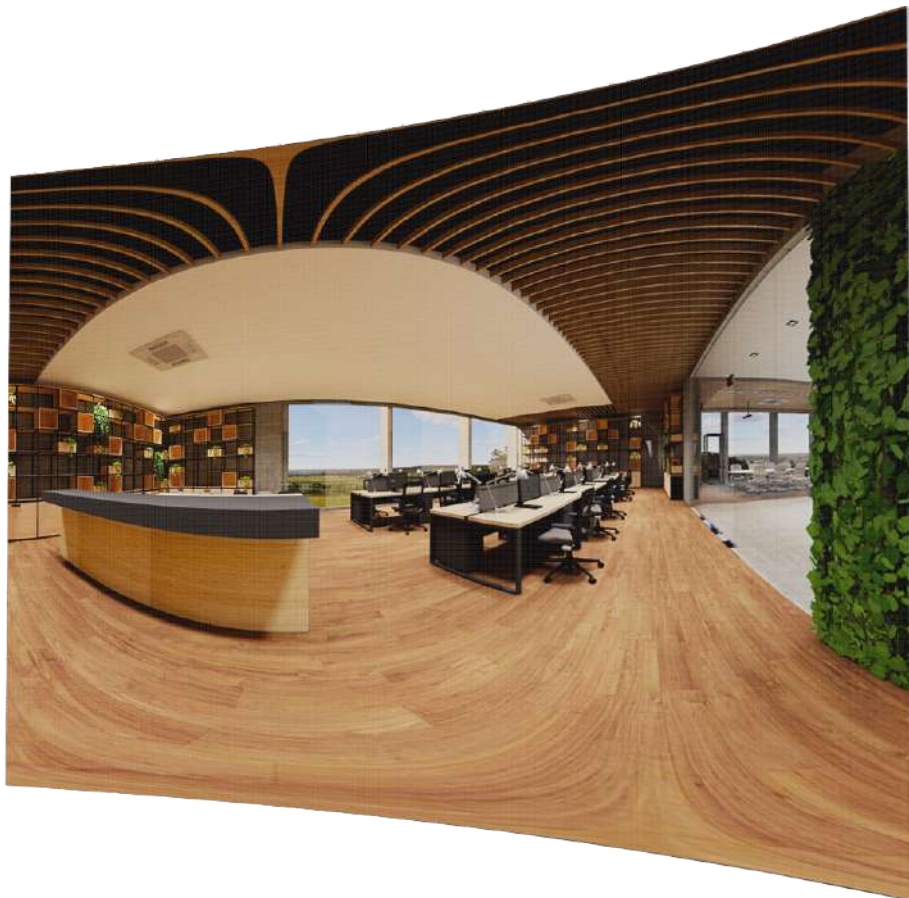
## COB TECHNOLOGY

The P1.5 version of the QWARTZ 3.0 integrates COB – Chip On Board technology. This technology represents a major step forward in the field of LED display by mounting the LED chips directly onto the printed circuit board, without individual LED packages.

This architecture enables higher pixel density, significantly reduces the space between pixels, and provides a smoother, more uniform image surface that

is particularly comfortable at very short viewing distances.

The result is a striking visual rendering, combined with improved heat dissipation, optimized power consumption and increased durability. Ideal for demanding environments, COB technology delivers an immersive and precise visual experience, even in close-viewing configurations.



## COMPATIBLE WITH THE BROMPTON ENVIRONMENT

For exceptional installations, the QWARTZ 3.0 can be equipped with Brompton Technology receiving cards.

As a key reference in virtual production, extended reality and premium LED display environments, the Brompton ecosystem provides high-end image processing as well as access to advanced features: automatic brightness and colour calibration, geometric image adjust-

ment, multi-screen splicing, precise colour management and camera-oriented rendering optimization.

This compatibility enables the QWARTZ 3.0 to meet the requirements of the most ambitious projects, from high-end corporate environments and XR studios to immersive showrooms and complex architectural installations.



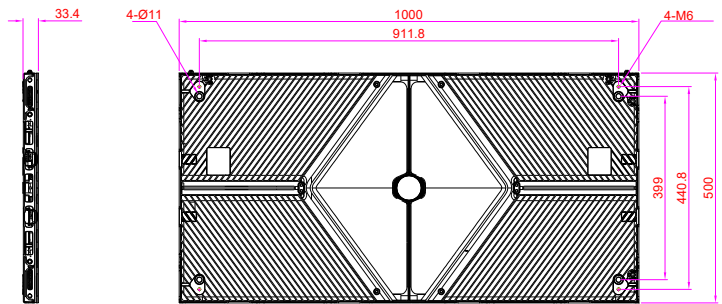
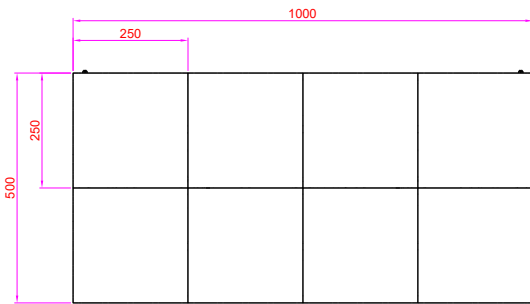
## TECHNICAL SPECIFICATIONS

Product Parameters	Unit	INDOOR		
		1.5	1.9	2.6
Pixel Pitch	mm	1,56	1,95	2,60
LED		COB (SMD1212 GOB or SMD1010 HB GOB opt.)	SMD1212 (SMD1010 HB opt.)	SMD1515 (SMD1415 HB opt.)
Application		Front maintenance indoor LED cabinet		
Ingress Protection	IP	IP20		
Brightness	cd/m <sup>2</sup>	≤ 600 Nits @5volts (800 & 3000 Nits opt.)	≤ 1000 Nits @5volts (≤ 3000 Nits opt.)	≤ 1000 Nits @5volts (≤ 3500 Nits opt.)
Color Temperature after calib (adjustable)	deg. K	6500		
Viewing Angle (50% brightness)	deg.	160 H / 160 V		
Cabinet Size (WxHxD)	mm	1000x500x33.4 / 1000x250x33.4 / 750x500x33.4 / 500x500x33.4 / 500x250x33.4 / 250x500x33.4 / 250x250x33.4		
Display area (WxH)	mm	1000x500 / 1000x250 / 750x500 / 750x250 / 500x500 / 500x250 / 250x500 / 250x250		
Module Size (WxHxD)	mm	250 x 250 x 2.6		
Pixel Matrix Per Cabinet (WxH)	px	640 x 320 / 640 x 160 / 480 x 320 / 480 x 160 / 320 x 320 / 320 x 160 / 160 x 320 / 160 x 160	512 x 256 / 512 x 128 / 384 x 256 / 384 x 128 / 256 x 256 / 256 x 128 / 128 x 256 / 128 x 128	384 x 192 / 384 x 96 / 288 x 192 / 288 x 96 / 192 x 192 / 192 x 96 / 96 x 192 / 96 x 96
Pixel Matrix Per Module (WxH)	px	160 x 160	128 x 128	96 x 96
Pixel Density	px/m <sup>2</sup>	409600	262144	147456
Weight	kg/m <sup>2</sup>	17.4		
Cabinet Material		Die casting aluminum		
Maintenance Mode		Front		
Mask specification		COB (GOB opt.)	95% Plastic + 5% Fiber / Clips (no screws) / No shaders (HOB opt.)	
Contrast Ratio		20000:1 (10000:1 GOB & 14000:1 HB GOB)	8000:1	
Grey scale (linear)	bit	≥ 14		
Brightness control	bit	16		
Processing depth	bit	16		
Color		281 Trillions		
Display Refresh Rate	Hz	3840	7680	
Operation Power	V	AC100-240V		
Max. Power Consumption	W/m <sup>2</sup>	300 (500GOB & 570 HB GOB)	400 (540 HB)	
Average Power Consumption	W/m <sup>2</sup>	100 (165 GOB & 190 HB GOB)	165 (175 HB)	
Control Mode		Synchronous / Asynchronous		
Video Frame Rate	Hz	50/60Hz		
Input Types Supported		Yes		
Support Backup (signal & power)		Yes		
Calibration		Yes		
Lifetime (50% brightness)	h	50000		
Operating Humidity Range		10-95%		
Operating Temperature Range		-20°C / +50°C		
Certification		CE / FCC / ETL / CB		
Compatibility		All cabinet sizes are compatible with each other		
Available options		Rounded corner cabinet, hanging bars, wall support, poster footstand, HOB, Brompton Technology RC		

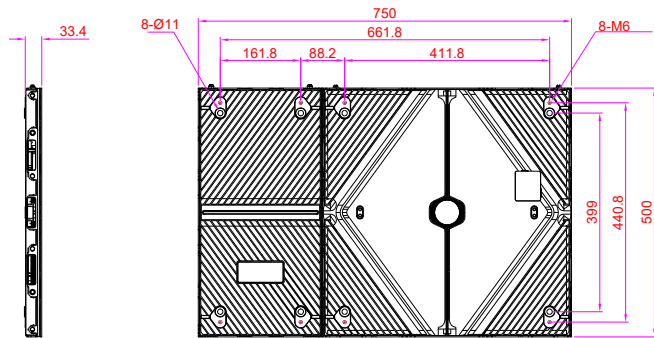
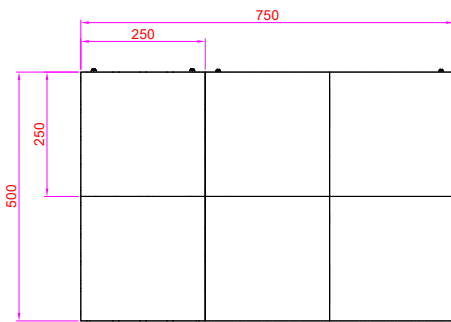


# TECHNICAL DRAWINGS

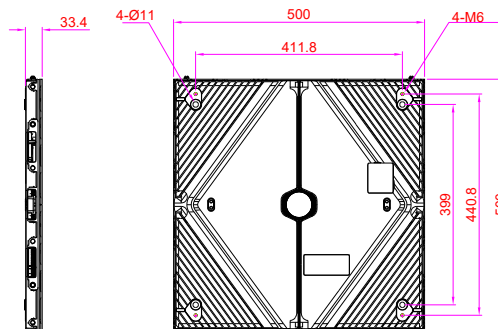
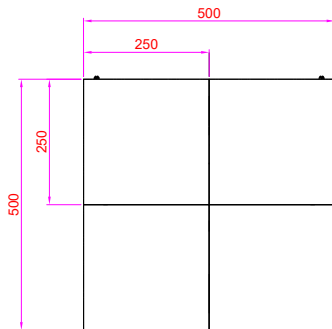
1000 X 500 X 33 MM



750 X 500 X 33 MM



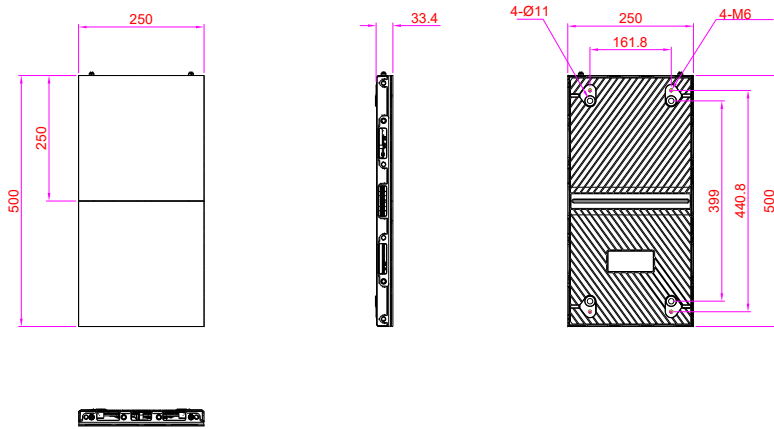
500 X 500 X 33 MM



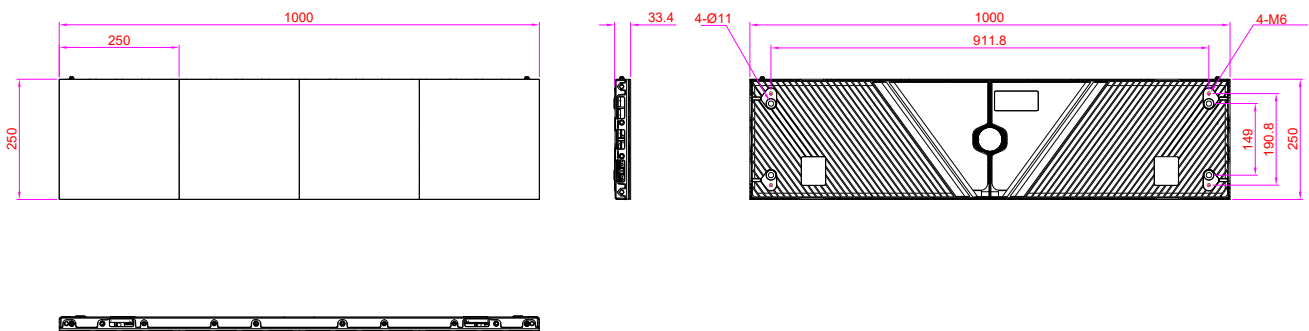


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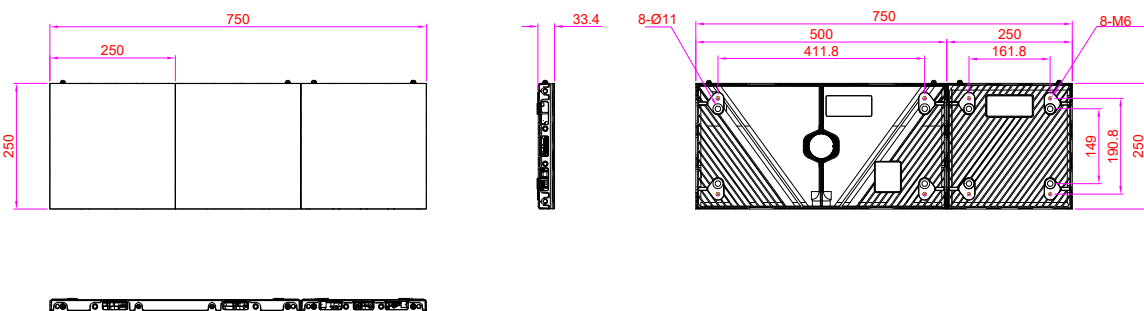
250 X 500 X 33 MM



1000 X 250 X 33 MM



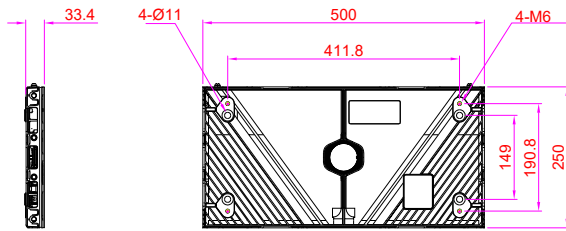
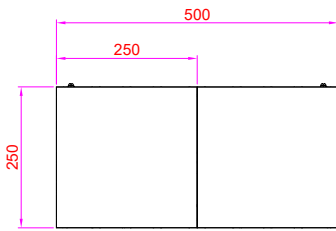
750 X 250 X 33 MM



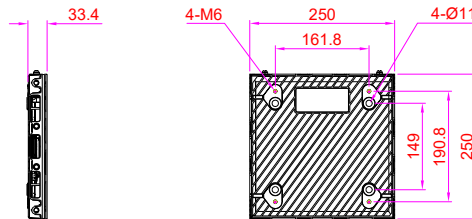
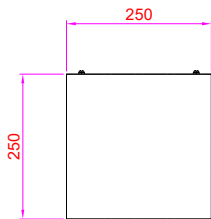


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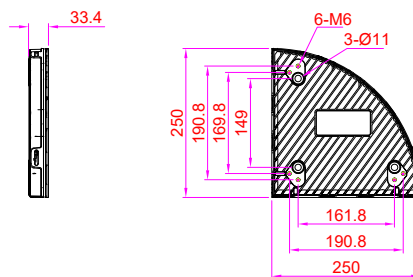
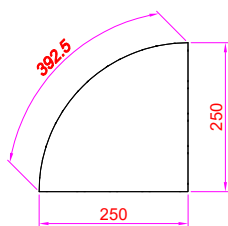
500 X 250 X 33 MM



250 X 250 X 33 MM



250 X 250 X 33 MM CURVE





# 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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