

Lightweight

IP66

FA2 Max

Cutting-edge Outdoor LED Display Technology Solution





Slim and Lightweight Design

The aluminum cabinet is designed to be 28kgs lighter than conventional cabinets in the market. Lighter cabinets provide more convenience for installation. 1m by 1m panel size can be easily assembled into big screen of different dimensions. In order to fit some special screen areas, we can also make other panel sizes.

- 1m(w) x 1m(h), 1.5m(w) x 1m(h), 1m(w) x 0.5m(h),
 1.5m(w) x 0.5m(h)
- 90mm thickness
- 28.5kgs weight

The pixel pitch P2.9, P3.9, P4.8, P6.25, P7.8 and P10.4 are available.

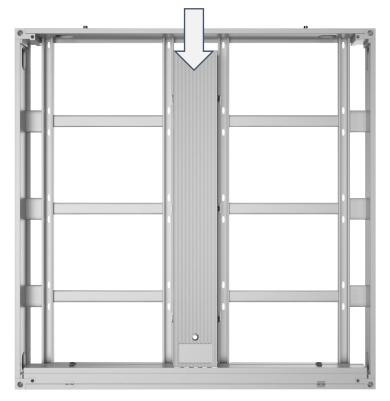


All Aluminum Design for Better Heat Dissipation, No Need Air Conditioner

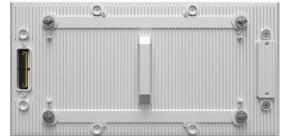
Reinforced aluminum cabinet construction, designed to resist rust in module improve stability coastal environments. Die-cast aluminum power box forimproving waterproofing. Its deep vertical grain surface enhances heat dissipation.

The striped design on the surface of both the module and the power box enhances the heat dissipation area, allowing for rapid cooling of the power supply and module. This improvement contributes to an extended service life of the product.

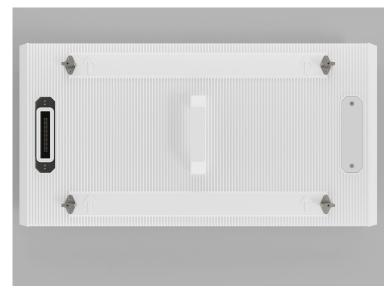
The screen is capable of functioning in any environment, including the hot regions of the Middle East. Even at temperatures reaching 60 degrees Celsius, the display operates normally without the need for air conditioning installation. Die-casting Aluminum Compartment for power supply and receiving card



Aluminum Cabinet



Die-casting Aluminum module





Cable Free with Dual Module Connectors

The design eliminates the necessity for ribbon cables, resulting in significantly enhanced signal connections compared to conventional designs available on the market. Moreover, the incorporation of pin connectors further improves signal stability.

Power supply for the module is facilitated through dual cylindrical pure copper connectors, ensuring a more secure and stable power source. Additionally, these connectors are designed with error-proofing features and include an arrow mark on the module to prevent incorrect installation that could potentially lead to damage.

Both sides of the module are equipped with signal and power connectors, providing greater flexibility in spare parts utilization. This configuration allows each module to be installed on either side of the enclosure.



Features of LED Display Cabinet

Large module handle for easy IP66 rated for waterproof maintenance and dustproof protection Reinforced aluminum cabinet construction, designed to resist rust Lightweight at just in coastal environments. 28kg per sqm The LED cabinet's modules, power supply, The hidden wire design receiving card, HUB card, effectively prevents exposure of and other components wires to sunlight, thereby support both front and reducing the risk of insulation rear maintenance.

Test button for pre-installation testing

degradation and extending the

overall service life of the wiring



High Brightness and Contrast Make the Screen Perform Better in Sunlight

Our screens are equipped with high-brightness black or white LED lamps, enabling them to deliver exceptional brightness and color performance even in direct sunlight while consuming less power. Our maximum brightness can exceed 10,000 nits.

Additionally, the innovative mask design and nanofabrication process contribute to a darker appearance of the module's mask. Compared to other LED display products available on the market, our displays offer enhanced clarity in sunlight, even at equivalent brightness levels.

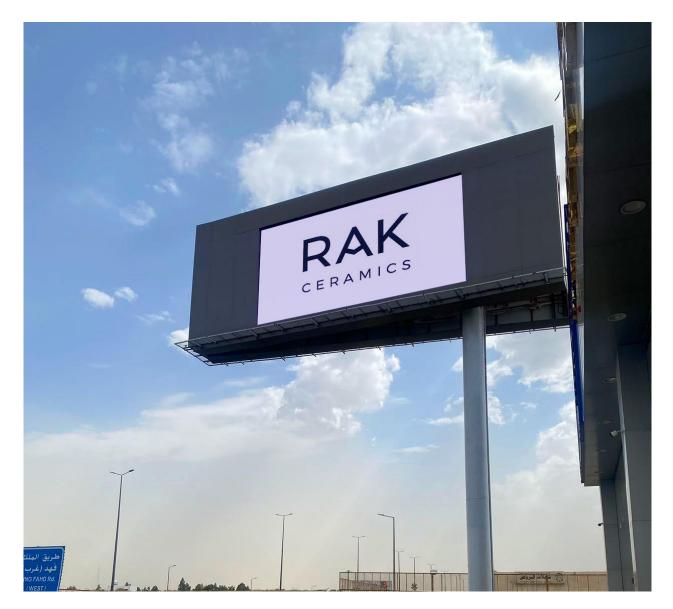
Furthermore, our masks provide protection for the lamp against external impact forces, preventing damage to LED lamps during installation and transportation. Moreover, their unique design also minimizes exposure time to ultraviolet light, thereby extending their lifespan.



IP66 High Water and Dust Protection Level

The LED screens used in outdoor environments encounter more challenges compared to their indoor counterparts, such as exposure to dust and water damage. To ensure that the LED screens operate safely and reliably in outdoor settings, we implement advanced protective measures designed to withstand heavy rain and strong winds over extended periods. The IP66 rating effectively isolates electronic components from humidity and dust, thereby enhancing the screen's overall reliability.





Super Energy Saving

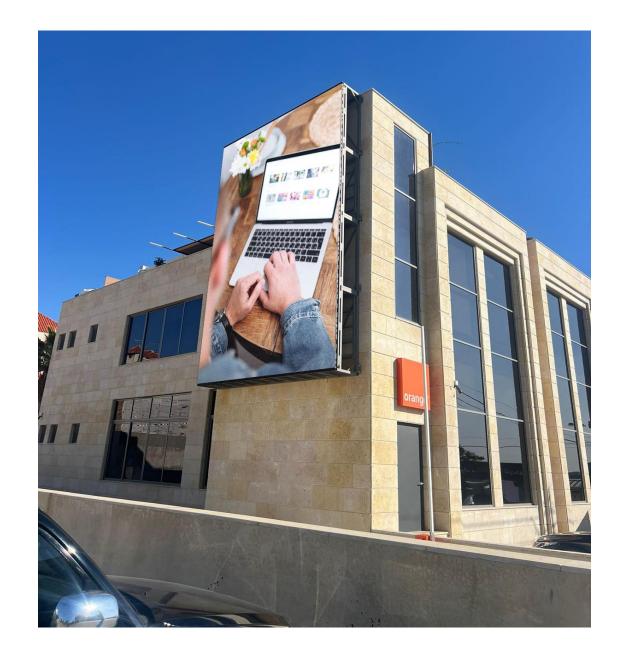
With its cutting-edge circuitry, our display technology is designed to achieve a power consumption reduction of 30% to 50% when compared to other outdoor LED displays currently available in the market.



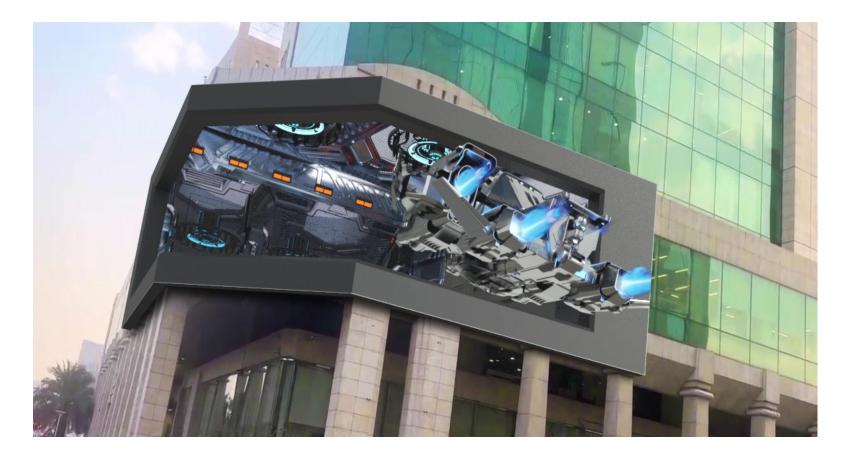
Never Blackout

The LED panel is designed with N+1 redundancy for both the power and signal systems, ensuring that the screen will never blackout even in the event of a power supply or receiving card failure.

The LED panel operates on an AC110V - AC220V voltage system, making it compatible with power systems worldwide. Additionally, the panels are certified by CE, ROHS, ETL, CB, CCC, and other relevant standards.







3D Design

Our LED display is capable of showcasing the effects of an outdoor and indoor naked-eye 3D screen with exceptional clarity.



Cutting-edge LED display technology - Intelligent LED Panel Design

Our LED panel represents a revolutionary advancement in high-tech outdoor LED display products, distinguished by the following advanced features:

Module spot check function: The system is designed to accurately identify both the quantity and positioning of RGB chips within the LED lamps of the display screen. This capability enables technicians to efficiently diagnose and address any issues related to the LED lamps or driver ICs. In instances where problems arise, the system will automatically dispatch an email notification to alert users.

Voltage monitoring: The system continuously monitors the power supply's operating voltage to ensure it stays within acceptable limits, allowing for effective assessment of its status. In case of a power supply failure, an email alert will be promptly sent to users.

Module connector detection : This feature ensures that the HUB card is functioning correctly. If any issues are detected with either the HUB card or module connector, users will receive an immediate email alert from the system.

Module operating temperature detection : In situations where a short circuit within a module leads to elevated temperatures that could potentially damage or melt components such as masks and PCB boards, users will be swiftly notified by the system. This proactive measure allows for timely intervention to prevent further damage to both the LED screen and mitigate potential fire hazards.

Intelligent LED Panel Design - Notification of LED Display Errors

The following images depict some common issues encountered with LED displays available in the market. When similar problems arise, users utilizing our advanced systems and designs will receive prompt notifications via email, allowing them to address the issue swiftly.



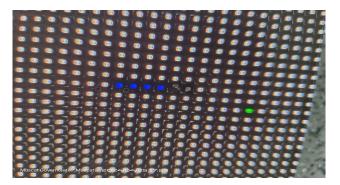
Faulty receiving card or network cable



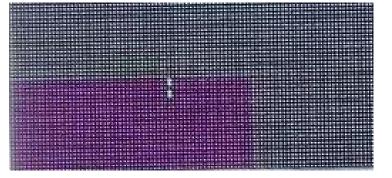
LED screen is on fire or module is burning



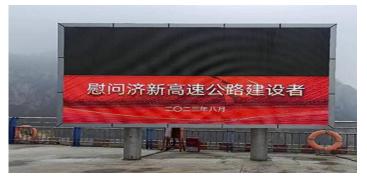
Module connector, power cable or Hub card issue





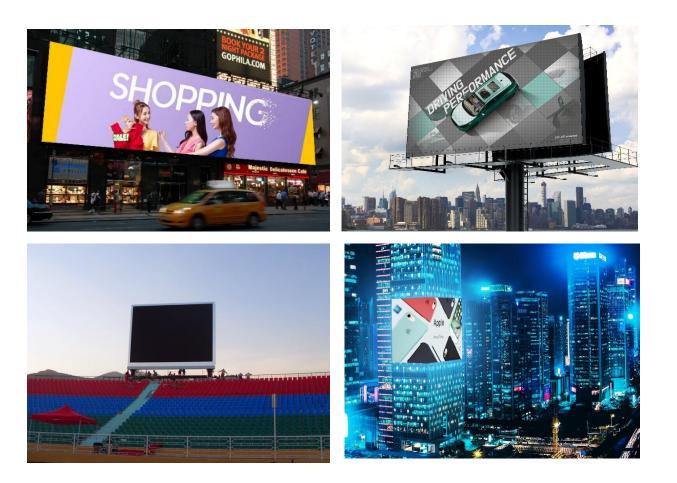


Driving IC error



Faulty power supply or cable





Application Fields

To fit every different scene, our products utilize superior materials with a concise and strong structure, and various installation methods make it flexible and easy to apply.

This product is usually used in.

- Truck Trailers;
- Scoreboards;
- Digital Out Of Home(DOOH).

ltem	P2.9	P3.91	P4.8	P6.2	P7.8	P10.4
Pixel Pitch	2.9761mm	3.906mm	4.807mm	6.25mm	7.8125mm	10.417mm
LED Type	SMD1415	SMD1921	SMD1921	SMD2727	SMD2727	SMD2727
Module Resolution	168dots $ imes$ 84dots	128dots $ imes$ 64dots	104dots $ imes$ 52dots	80dots x 40dots	64dots x 32dots	48dots x 24dots
Driving Mode	1/14scan	1/16scan or 1/8scan	1/7scan / 13 scan	1/5scan	1/4scan	1/2scan
Module Pixels	14,112dots	8192dots	5408dots	3200dots	2048dots	1152dots
Module Size	500mm x 250mm					
Cabinet Size	1000mm x 1000mm	1000mm x1000mm				
Cabinet Resolution	336dots x 336dots	256dots x 256dots	208dots x 208dots	160dots x 160dots	128dots x 128dots	96dots x 96dots
Pixel Density	112,896dots/m ²	65,536dots/m ²	43,264dots/m ²	25,600dots/m ²	16,384dots/m ²	9216dots/m ²
Minimum Viewing Distance	≥2.9 m	≥3.9 m	≥4.8 m	≥6.2 m	≥7.8 m	≥10m
Brightness	4500nits \sim 5500nits	6,000nits ~ 8,500nits	6,000nits~8,500nits	6,000nits ~ 10,000nits	6,000nits ~ 10,000nits	6,000nits ~ 10,000nits
IP Grade	IP66	IP66	IP66	IP66	IP66	IP66
Refresh Rate	3,840Hz∼40,000Hz	3,840Hz~40,000Hz	3,840Hz∼40,000Hz	3,840Hz∼40,000Hz	3,840Hz∼40,000Hz	3,840Hz∼40,000Hz
Gray Scale	14bits \sim 22bits	14bits~22bits	14bits \sim 22bits	14bits \sim 22bits	14bits \sim 22bits	14bits \sim 22bits
Viewing Angle	H:160° / V:160°					
Maximum Power Consumption	560W/m²	560W/m²	560W/m²	560W/m²	560W/m²	560W/m²
Average Power Consumption	150W/m²	150W/m²	150W/m²	150W/m²	150W/m²	150W/m²
Input Voltage	AC110V - AC220V @ 50Hz/60Hz					
Operating Temperature	- 35℃~65℃	- 35℃~65℃	- 35℃~65℃	- 35℃~65℃	- 35℃~65℃	- 35℃~65℃
Operating Humidity	10%~90%	10%~90%	10%~90%	10%~90%	10%~90%	10%~90%
Cabinet Material	Aluminum profile + Aluminum die-casting	Aluminum profile + Aluminum die-casting				
Cabinet Weight	28kg/sqm	28kg/sqm	28kg/sqm	28kg/sqm	28kg/sqm	28kg/sqm
Operating System	Windows	Windows	Windows	Windows	Windows	Windows
Signal Source Compatibility	DVI,HDM, WIFI, etc.					