

Transparent LED display

- The LED transparent screen is the first new concept LED display proposed in 2013. The name is to distinguish it from the traditional LED display, light bar screen and glass screen. In just a few years, the concept of "transparent LED display" has been promoted in a large area. Many products in the industry include glass screens, light bar screens, grill screens, curtain screens, grids, screens, etc. This naming triggered a "transparent LED display" boom.
- LED transparent screen, as its name suggests, is based on "transparency". The objective performance of the traditional screen is opaque and airtight, resulting in many problems such as excessive screen body, poor heat dissipation, complicated structure, high power consumption, and abrupt shape. This has given birth to a "transparent LED display".



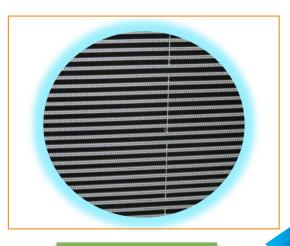
Light transmission Ventilation



Light Thin ,
Without steel structure



Customized cabinet



Rapid cooling

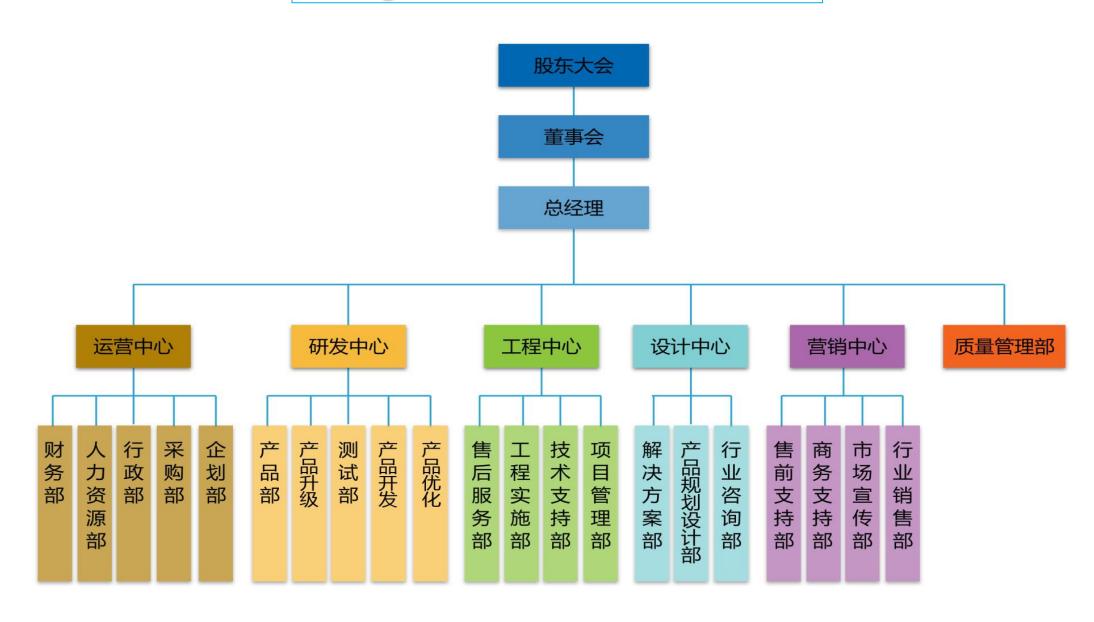
Directory

01/ Corporate culture **Transparent screen Contact us** market prospects

(Company profile)

- Shenzhen Guojia Optoelectronics Co., Ltd. is a subsidiary of Guojia Group. It is a high-tech enterprise (registered capital of 50 million) to focus on LED manufacturing, research and development, design, sales and engineering services.
- The company's main products are LED transparent screen, LED window display screen, LED screen, LED lamp screen and LED lighting and other applications. The company has professional production equipment and excellent technology, senior and experienced management team, professional technical development staff, skilled and well-trained workers with many years of operating experience. The company strictly enforce the 7S management standards and industry standards, has passed ISO9001-2000 / 3C / CE / FCC / ROHS quality system certification, reliable quality, advanced technology, cutting-edge technology, fully automated production equipment, large sales network and good service are the fundamental elements that enable us to provide high-quality products. Our products are exported to North America, Europe and the Middle East and other overseas markets, such as Sweden, Britain, Italy, Germany, Romania, Serbia, Poland, Turkey, Israel, Spain, Portugal, the United States, cartels, Singapore and more than 110 countries.

(Organizational structure)



(Invention patent, utility model, design)

















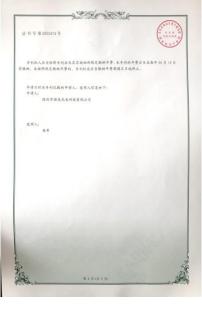














其他事项参见背面































(Certification certificate)











Passed CCC China National Compulsory
Product Certification

FCC certified

Passed CE certification

Passed RoHS certification

Pass energy certification

Pass waterproof certification

Rigorous testing by third-party authorities:

Passive test

High and low temperature test qualified

Harmonic current test qualified

Qualified for voltage fluctuation test

Flicker test qualified

Qualified for vibration test

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(Company Culture)

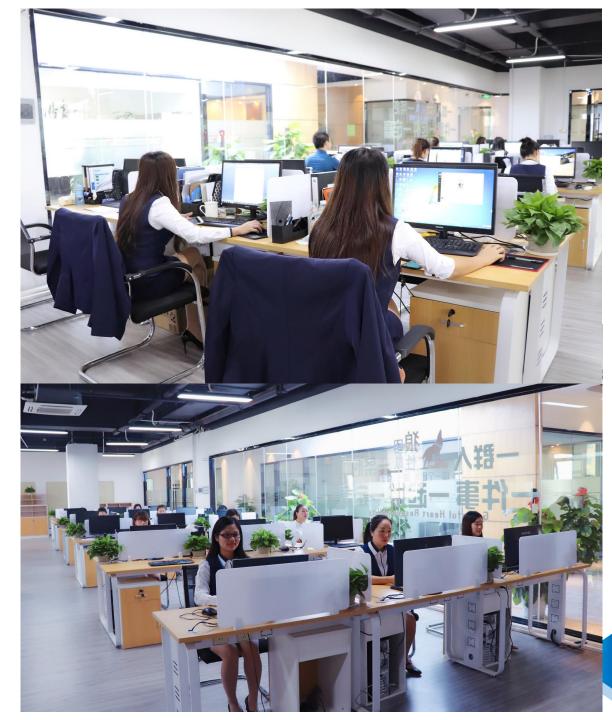
- Corporate values:
- Inovation and development, the pursuit of excellence.
- Enterprise spirit:
- Pioneering innovative realistic and dedicated.
- Development goals:
- Tocreate a modern enterprise with international competitiveness.
- Team awareness:
- one heart and one mind, unity and hard work; sincere cooperation, advance together.
- Business Principle:
- Good faith wins the world.
- Service Principle:
- Professional, dedicated, providing quality products and excellent service.

(Part of the office area)









(Product introduction)

Product introduction

- Transparent screen: transparent LED display, just as its name implies, is a LED display that has the property to let light pass through, just like glasses. With high permeability, ultra-light features, it is an innovation of strip screen, and improvements on SMD manufacturing process, packaging and control system. With hollow structure design, eliminated components that blocking sight, the perspective effect is maximized.
- At the same time, it also has unique display effect, when the audience standing at an ideal distance, the
 picture seems to suspend on the glass curtain wall. LED transparent screen let LED display to expand the
 application area to building glass wall and shopping window, it has become a new trend in new media
 market.
- Along with the outdoor advertising, the LED screen is flooded with a series of negative issues, including urban image problems. LED display can play the function of city lighting and information spread, but in the off time it is like a piece of "city scar", misfit the surrounding environment, greatly affected the city's appearance, destroyed the city scenery.
- As a result of these problems, the regulation and approval of outdoor large screen installation become
 more and more complicated, and the management of outdoor advertisement is becoming more and
 more strict.

Product introduction

- Transparent LED display not only integrates all the advantages of the conventional outdoor high-definition LED display, but also eliminates the problem of urban image to the maximum. Because it is installed in the rear of the glass curtain wall, even if it is not working, it will not have any impact on the surrounding environment. At the same time, because it is indoor advertising to play to outdoor audiences, so it can avoid the approval of outdoor advertising.
- In addition, with the development of city construction, glass curtain wall has gradually become popular, transparent Led display with its thin, no steel structure, easy installation and low maintenance, is becoming a best partner with glass curtain wall, not only it has no sense of intrusion, it is fashionable and beautiful, adding atmosphere of modern science and technology to the city building. Therefore, LED transparent screen in the market has won everyone's support, and received widespread attention
- LED transparent glass is suitable for medium size LED display advertising application, in the absence of direct sunlight conditions it can be used in daytime, module size can be customized for glass curtain wall to achieve seamless splicing. As long as there is a glass curtain wall, this product can be applied. Such as banks, shopping malls, theaters, commercial streets, chain stores, hotels, municipal public buildings, landmarks, etc.

Contrast with traditional screen: the advantage of transparent screen



• 01

High transparent effect

with high transparency rate of 60% - 95%, ensure the lighting requirements and angle between floors, glass windows, facade lighting structure. Small space occupation, light weight. The display thickness is only 10cm, the display screen body weight only 15Kg/m^2 .



• 02

No steel frame construction

No steel frame construction, save a lot of installation and maintenance costs. Directly fixed on the glass curtain wall.

Unique display effect: because the display background is transparent, the advertisement picture can be suspended on the glass curtain wall, shows good advertisement effect and artistic effect.



• 03

Convenient maintenance

Indoor maintenance, quick and safe, save manpower and material resources.no traditional air conditioning cooling system, save more than 35% energy than ordinary LED display.



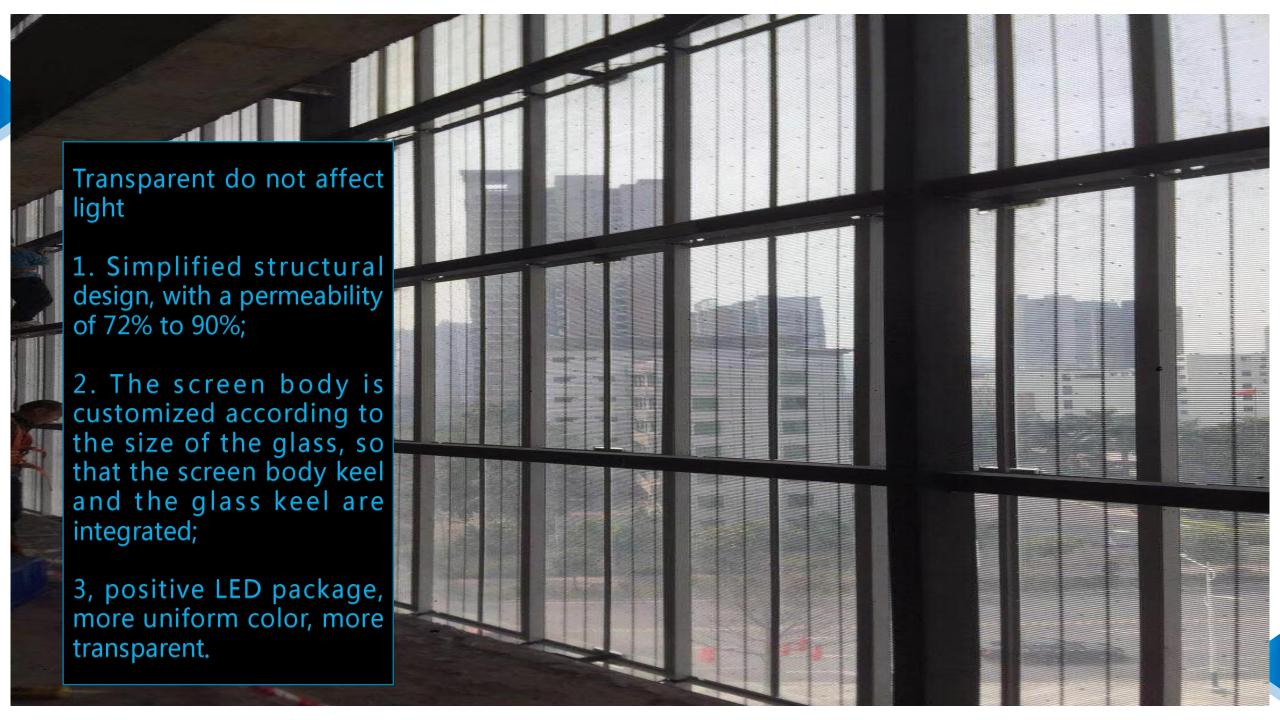
Light Thin , Without steel structure

Ultra-light and thin screen body, 12kg~15kg/case, can be directly attached to the original glass curtain wall keel structure installation, without additional installation of steel structure, saving space and installation cost;

Indoor installation, outdoor viewing

Screen body indoor installation, easy to maintain more secure; outdoor viewing do not need architectural design institute audit, or easily passed the audit;





(Glass media facade video wall)

Renderings





玻璃幕墙结构形式

Glass curtain wall structure

根据支撑结构, 分三种类型的玻璃幕墙

According to the support structure, there are three types of glass curtain walls.

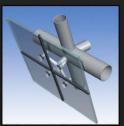


Frame support curtain wall 框支撑幕墙

玻璃面板由金属框架支撑

Glass panel supported

by metal frame



Point support curtain wall 点支撑幕墙



Full glass curtain wall 全玻璃幕墙

玻璃面板由点支撑装置和

支撑结构组成

玻璃面板由玻璃肋支撑 Glass panel supported by glass ribs

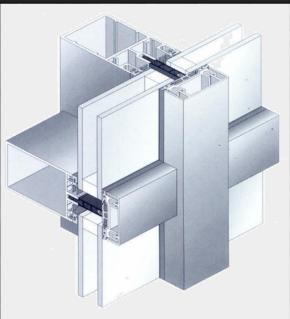
The glass panel consists of a point support device and a support structure



框支撑幕墙



隐框支撑幕墙 玻璃幕墙外表面不显露金属骨架构件。





玻璃幕墙结构形式

框支撑幕墙

明框支撑幕墙

玻璃幕墙外表面显露金属骨架构件。





玻璃幕墙结构形式

框支撑幕墙

半隐框支撑幕墙

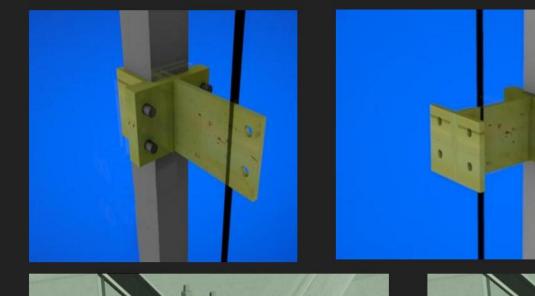
支撑框架的垂直或水平结构 显露在玻璃幕墙外表面

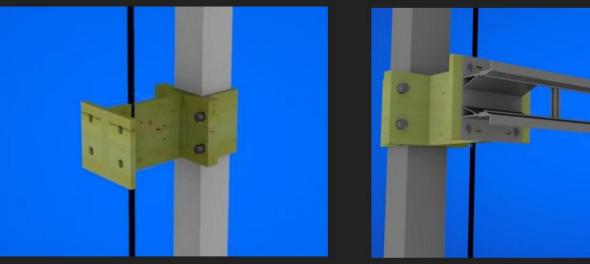
安装方式 Installation method

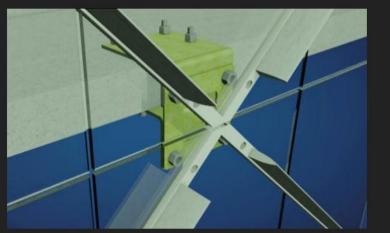
玻璃幕墙外侧

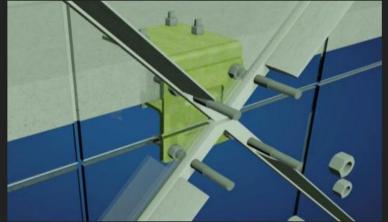
Outside the glass curtain wall

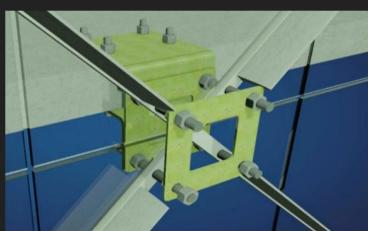
利用现有的玻璃幕墙支撑结构,扩展新的支撑点来固定LED显示屏 Use existing glass curtain wall support structure to expand new support points to secure LED display











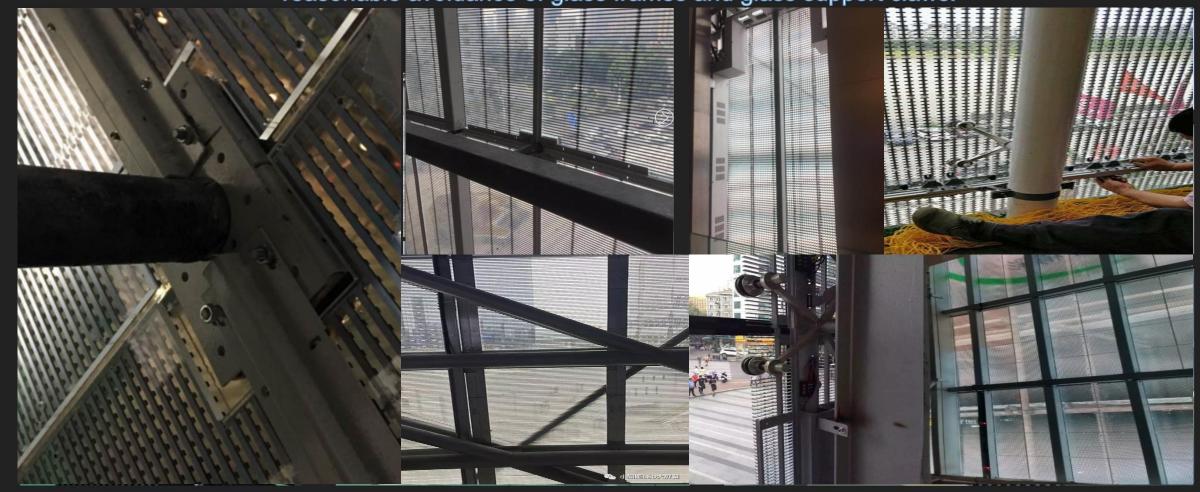
安装方式 Installation method

玻璃幕墙内侧

Inside the glass curtain wall

安装将取决于现有的玻璃幕墙结构,合理避免玻璃框架和玻璃支撑爪

Installation will depend on the existing glass curtain wall structure, reasonable avoidance of glass frames and glass support claws.



产品参数 Product parameters

产品型号:	GJ-PH3.91		GJ-PH5		GJ-PH6.25		GJ-PH7.82		GJ-PH7.82
物理点间距:	3.91mm-7.82mm		3.91mm-5mm		6.25mm-6.25mm		7.82mm-7.82mm		7.82mm-15.64mm
模块尺寸:	500mm*1000mm 1000mm*1000mm		500mm*1000mm 1000mm*1000mm		500mm*1000mm 1000mm*1000mm		500mm*1000mm 1000mm*1000mm		500mm*1000mm 1000mm*1000mm
像素密度:	32768px/m²		51200px/m²		25600px/⊯		16384px/m²		8192px/ m²
发光点颜色:	1R1G1B		1R1G1B		1R1G1B		1R1G1B		1R1G1B
最佳视距:	5 ~ 100m		5 ~ 100m		8 ~ 100m		8~100m		10~100m
通透率:	70%		65%		70%		75%		75%
重量:	15KG/m²		15KG/ m²		15KG/m²		15KG/ m²		14KG/ m²
最大视角:	120°~120°		120°~120°		120°~120°		120° ~ 120°		120°~120°
屏体厚度:	8cm		8cm		8cm		8cm		8cm
平均功率:	100w/m²	200w/m²	100w/m²	200w/m²	100w/ n²	200w/m²	100w/m²	200w/ m²	200w/m²
最大功耗:	300W/m²	600W/m²	300W/m²	600W/m²	300W/m²	600W/m²	300W/m²	600W/m²	600W/m²
刷新频率:	≥1920Hz	≥3840Hz	≥1920Hz	≥3840Hz	≥1920Hz	≥3840Hz	≥1920Hz	≥3840Hz	≥1920Hz
驱动方式:	1/165	1/85	1/165	1/85	1/165	1/85	1/85	1/45	1/15
白平衡亮度:	≥1200cd/m²	≥5000cd/m²	≥1500cd/m²	≥5000cd/m²	≥1500cd/m²	≥5000cd/m²	≥5000cd/n²	≥1500cd/m²	≥1500cd/m²
平均无故障时间:	≥6500H								
使用寿命:	100000H								
安装方式:	吊装/叠装								
防护等级:	IP45								

产品型号:	GJ-PH10.4	GJ-PH15.64	GJ-PH20	GJ-PH25	GJ-PH31.25	GJ-PH40	
物理点间距:	10.4mm-10.4mm	15.62mm-15.64mm	20mm-20mm	25mm-25mm	31.25mm	40mm~40mm	
模块尺寸:	500mm*1000mm 1000mm*1000mm	500mm*1000mm 1000mm*1000mm	500mm*1000mm 1000mm*1000mm	500mm*1000mm 1000mm*1000mm	500mm*1000mm 1000mm*1000mm	500mm*1000mm 1000mm*1000mm	
像素密度:	9216px/ n²	4096px/ 🗗	2500px/ m²	1600px/ m²	1024px/ m²	625px/ n²	
发光点颜色:	1R1G1B	2R2G2B	2R2G2B	2R2G2B	2R2G2B	2R2G2B	
最佳视距:	15 ~ 120m	20~150m	25 ~ 150m	25-180m	35 ~ 180m	40 ~ 200m	
通透率:	80%	85%	88%	90%	92%	95%	
重量:	14KG/m²	14KG/m²	13KG/ m²	13KG/m²	12KG/≅	12KG/m²	
最大视角:	120° ~ 120°	120° ~ 120°	120° ~ 120°	120° ~ 120°	120° ~ 120°	120° ~ 120°	
屏体厚度:	8cm	8cm	8cm	8cm	8cm	8cm	
平均功率:	200w/ n²	200w/ n²	200w/m²	200w/ n²	200w/ m²	200w/ n²	
最大功耗:	600W/m²	600W/m²	600W/m²	600W/m²	600W/m²	600W/m²	
刷新頻率:	≥1920Hz	≥1920Hz	≥1920Hz	≥1920Hz	≥1920Hz	≥1920Hz	
驱动方式:	1/15	1/15	1/15	1/15	1/15	1/15	
白平衡亮度:	≥5000cd/m²	≥5000cd/n²	≥5000cd/n²	≥5000cd/m²	≥5000cd/n²	≥5000cd/m²	
平均无故障时间:	≥6500H						
使用寿命:	100000H						
安装方式:	吊装/叠装						
防护等级:	IP45						

(Window LED series)







产品参数 Product parameters

	i e	-	<u> </u>				
产品型号:	GJ-PH3.91	GJ-PH3.91	GJ-PH3.91	GJ-PH5	GJ-PH5		
物理点间距:	3.91mm-7.82mm	3.91mm-7.82mm	3.91mm-7.82mm	3.91mm-5mm	3.91mm-5mm		
模块尺寸:	L1000mm*H1500mm	L1000mm*H1750mm	L1000mm*H2000mm	L1000mm*H1500mm	L1000mm*H1750mm		
像素密度:	L256*H192	L256*H224	L256*H256	L256*H200	L256*H350		
发光点颜色:	1R1G1B	1R1G1B	1R1G1B	1R1G1B	1R1G1B		
最佳视距:	5 ~ 100m						
通透率:	70%	70%	70%	65%	65%		
最大视角:	120° ~ 120°	120° ~ 120°	120° ~ 120°	120° ~ 120°	120° ~ 120°		
屏体厚度:	8cm	8cm	8cm	8cm	8cm		
平均功率:	200w/m²	200w/m²	200w/m²	200w/m²	200w/m²		
最大功耗:	600W/m²	600W/m²	600W/m²	600W/m²	600W/m²		
刷新频率:	≥1920Hz	≥1920Hz	≥1920Hz	≥1920Hz	≥1920Hz		
驱动方式:	1/165	1/165	1/165	1/165	1/165		
白平衡亮度:	≥4000cd/m²	≥4000cd/m²	≥4000cd/m²	≥4500cd/m²	≥4500cd/m²		
平均无故障时间:	≥6500H						
使用寿命:	100000H						
安装方式:	吊装						
防护等级:	IP30						

产品型号:	GJ-PH5	GJ-PH6.25	GJ-PH6.25	GJ-PH6.25			
物理点间距:	3.91mm-5mm	6.25mm-6.25mm	6.25mm-6.25mm	6.25mm-6.25mm			
模块尺寸:	L1000mm*H2000mm	L1000mm*H1500mm	L1000mm*H1750mm	L1000mm*H2000mm			
像素密度:	L256*H400	L160*H240	L160*H280	L160*H320			
发光点颜色:	1R1G1B	1R1G1B	1R1G1B	1R1G1B			
最佳视距:	5 ~ 100m	8 ~ 100m	8 ~ 100m	8 ~ 100m			
通透率:	65%	75%	75%	75%			
最大视角:	120° ~ 120°	120° ~ 120°	120° ~ 120°	120° ~ 120°			
屏体厚度:	8cm	8cm	8cm	8cm			
平均功率:	200w/m²	150w/m²	150w/m²	150w/m²			
最大功耗:	600W/m²	450W/m²	450W/m²	450W/m²			
刷新频率:	≥1920Hz	≥1920Hz	≥1920Hz	≥1920Hz			
驱动方式:	1/165	1/85	1/85	1/85			
白平衡亮度:	≥4500cd/m²	≥4500cd/m²	≥4500cd/m²	≥4500cd/m²			
平均无故障时间:	≥6500H						
使用寿命:	100000H						
安装方式:	吊装						
防护等级:	IP30						

(Customization Transparent LED screen)







异型系列

- ◆ 创造性、造型定制化
- ▶超通透
- ◆ 极简、智能化控制
- ♦ 高效、节能、快速散热
- ◆ 高亮、高灰、大视角

Shaped series:

Creative, styling customization

Ultra transparent

Minimalist, intelligent operation

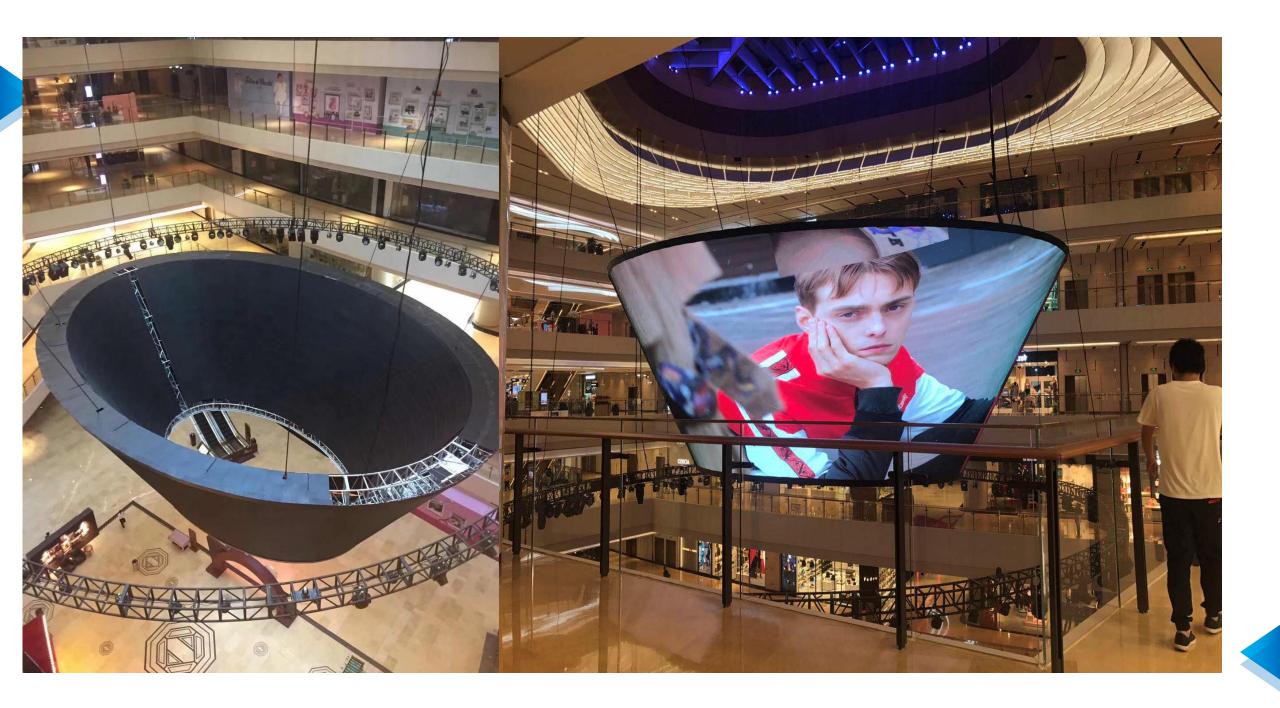
Efficient, energy-saving, and fast heat dissipation

High brightness, high gray, large viewing angle

Application place:

Shopping malls, exhibition halls, experience centers, sky screens, Building atrium, headquarters building, airport, science and technology museum, etc.





PART.0304

(Transparent rental screen series)

Rental LED transparent screen series - ice screen

LED transparent screen breaks through the traditional style to create a sense of space.

In recent years, we are starting to see some of the larger stage concert venues such as the transparent LED screen, such as China's access to the Internet 22 years theme parties, the G20 summit held in hangzhou to diva faye wong "a" magic music concerts, and so on, through the LED transparent screen to build a kind of spatial art effect, the artistic conception of the dream in front of the audience's eyes, also attracted many stage creators of eyeball, let us see the transparent LED screen applications in the field of stage design space.

In particular, nowadays, the development of modern society, stage art needs to break through the traditional stage style and go to the larger living space, namely the large-scale performing arts. Large-scale performing arts activities, especially the need to fully demonstrate high-tech factors, once involved in art domain, will greatly change the audience appreciate the conventional habits, to expand the space of art show to adjust people's aesthetic values. And the emergence of LED transparent screen, is meeting the current dance beauty to realize the demand of virtual reality space. "The two dimensions of the LED display are in conflict with the real space of the scene," said Chen xiaolin, a choreographer at the national CCTV national level. The occlusion characteristics of the flaky structure and the space of the scene create the design restriction. Overcoming this limitation is a problem for designers to avoid." For this reason, the LED transparent display screen has made up for the lack of traditional LED screen. LED display screen according to stage modelling diversity, transparent screen hanging strewn at random have send, show the overall depth of stage framework, using the screen itself fully, frivolous, dazzle colour features, have very strong perspective effect, make the whole picture of the depth of field. At the same time completely not obstruct stage design to leave the space that the light suspensions and play, give a certain atmosphere and feeling to the whole stage, can express the theme more. In the future, with the continuous improvement of LED transparent screen technology, the leasing road of LED transparent screen will achieve greater development space.



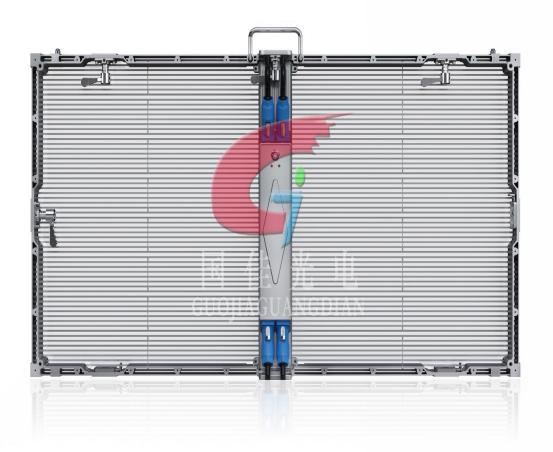
租赁LED透明屏技术参数

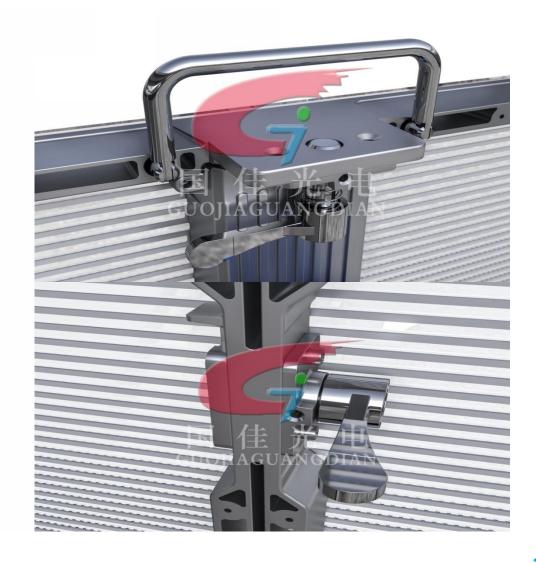
LED transparent screen technical parameters

产品型号:	GJ-PH3.91		GJ-PH5		GJ-PH6.25		GJ-PH7.82		GJ-PH7.82
物理点间距:	3.91mm-7.82mm		3.91mm-5mm		6.25mm-6.25mm		7.82mm-7.82mm		7.82mm-15.64mm
模块尺寸:	1000mm*500mm		1000mm*500mm		1000mm*500mm		1000mm*500mm		1000mm*500mm
像素密度:	32768px/m²		51200px/m²		25600px/ m²		16384px/m²		8192px/ m²
发光点颜色:	1R1G1B		1R1G1B		1R1G1B		1R1G1B		1R1G1B
最佳视距:	5 ~ 100m		5~100m		8 ~ 100m		8 ~ 100m		10~100m
通透率:	70%		65%		70%		75%		80%
重量:	15KG/ m²		15KG/ m²		15KG/m²		15KG/ ㎡		14KG/m²
最大视角:	120° ~ 120°		120° ~ 120°		120°~120°		120° ~ 120°		120° ~ 120°
屏体厚度:	8cm		8cm		8cm		8cm		8cm
平均功率:	100w/m²	200w/ n²	100w/m²	200w/ n²	100w/ ㎡	200w/m²	100w/m²	200w/ n²	200w/ n²
最大功耗:	300W/m²	600W/m²	300W/m²	600W/m²	300W/m²	600W/ ㎡	300W/ n²	600W/m²	600W/ m ²
刷新频率:	≥1920Hz	≥3840Hz	≥1920Hz	≥3840Hz	≥1920Hz	≥3840Hz	≥1920Hz	≥3840Hz	≥1920Hz
驱动方式:	1/165	1/85	1/165	1/85	1/165	1/85	1/45	1/85	1/15
白平衡亮度:	≥1200cd/ n ²	≥5000cd/m²	≥1500cd/n²	≥5000cd/m²	≥1500cd/m²	≥5000cd/m²	≥5000cd/n²	≥1500cd/m²	≥1500cd/m²
平均无故障时间:	≥6500H								
使用寿命:	100000H								
安装方式:	吊装/叠装								
防护等级:	IP45								









Transparent LED screen Market forecast

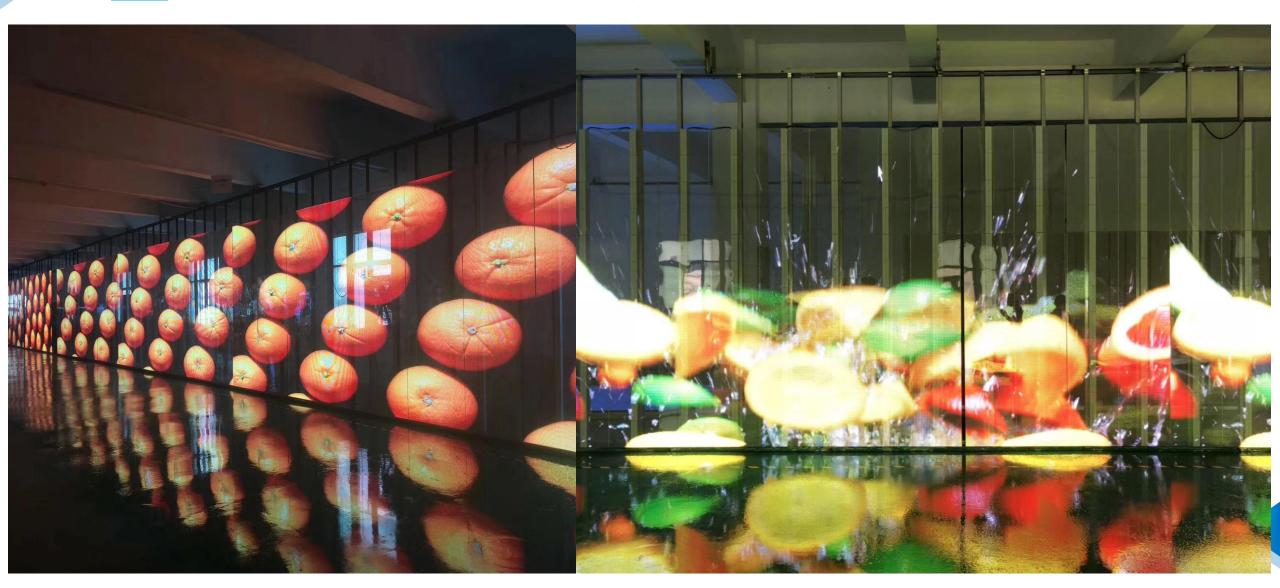
In the past two years, LED transparent screen began to shine on both indoor and outdoor site, commercial and stage areas. With innovation, highly transparency, strong sense of science and technology, and more in line with the environment, LED transparent screen quickly get high—end commercial display market. As well as fashion, science and technology establishments of all ages, opened up a dedicated path in a highly competitive market.

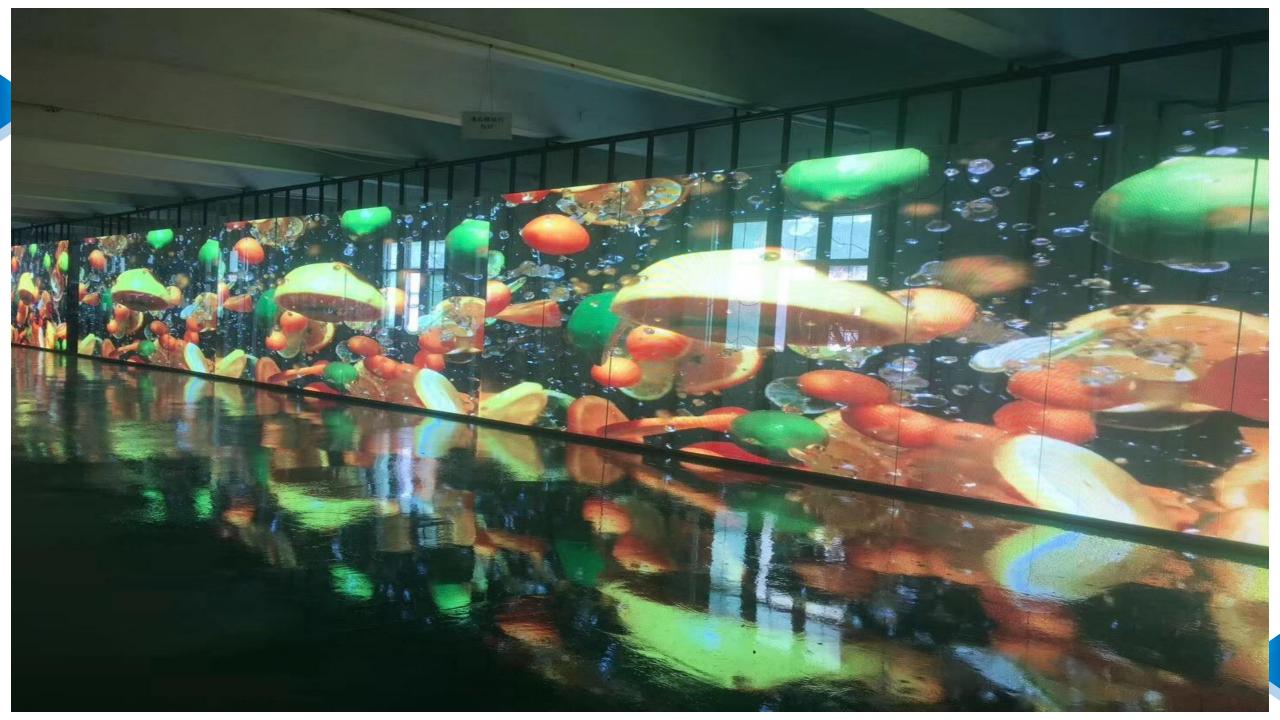
The translucent features, can give people amazing visual experience, the brightness, seamless with the building exterior, greatly increase the appearance of building. More and more businesses have chosen LED transparent screen to decorate the glass curtain wall construction.

In the commercial area, it more suits for fashion brands, high—end products. They all like transparent LED screen to bring the style of the brand and products. When playing promotional content, the transparent background not only increases the sense of technology, but also highlights the product itself, making high—end brands such as automobiles, fashion clothing and jewelry more attractive by our transparent screen.

Different from the bulky appearance of the **old style LED** display, the thin and beautiful LED transparent screen features will continue to help develop **the** market. As early as 2012, the U.S. investigation agency predicted that by 2025 the market output will be about 87.2 billion U.S. dollars. In today's commercial display, stage display, outdoor digital advertising and other fields show growing demand situation, LED transparent screen market volume will also be more and more, therefore, LED transparent screen market prospects are very broad, its future The potential for development is limitless.

Transparent screen aging test

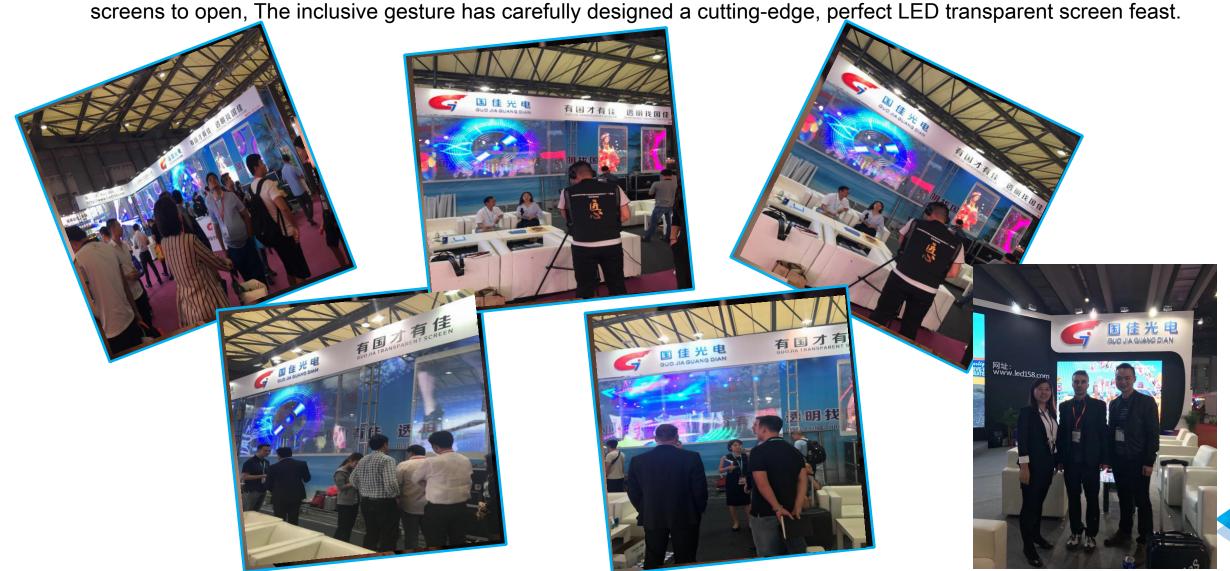








The 13th Shanghai International LED Exhibition (LED China) will be held at the Pudong New International Expo Center in Shanghai on September 20-22, 2017. It is one of the most influential and highest-level LED industry events in the world. Recognized by the industry as the "wind vane" for the development of the LED industry. There are six exhibition halls in the eight exhibition halls, and more than 1,200 exhibiting companies compete on the same stage to present the latest technologies and products from traditional advertising signs to digital advertising. Guojia Optoelectronics carries new LED transparent screens to open, The inclusive gesture has carefully designed a cutting-edge, perfect LED transparent screen feast.



March 3-6, 2018 Guangzhou International LED Exhibition
-Guojia Optoelectronics Brings New Products (Transparent Screen) at the Exhibition



transparent screen market.



In 2017, Australian customers and Guojia Optoelectronics signed a transparent screen agency strategy agreement, and our company successfully entered the Australian market.

Guojia Optoelectronics July 20-21, 2016 All sales elite training



On November 4th, 2017, Guojia Optoelectronics business elite made the four groups of members become a strategic team that can truly find problems and solve problems through the expansion project. Everyone has their own duties and responsibilities, and in the expansion project. Looking for the golden point of cooperation, and constantly forming a tacit understanding, this relationship is composed of a loose individual into a combination that can break through any defense line. Each member of the team enhances the confidence and courage to overcome difficulties in the progress of the project. It has improved the determination to face the difficulties but to persevere in the end. What is more valuable is to exercise the courage of each member and overcome the thinking style that sometimes only relies on feelings. Nothing is impossible, and surpassing oneself can create miracles.



Contact us

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