



# Indoor Transparent LED Wall



**TPS-06**

**Description: P2.6 - 5.9, P3.9 - 7.8**

**Module Structure: Lamp & Driven in 1**

**Lamp: SMD1921**

## Parameters (T=25°C)

Item	Parameter	Parameter	Remark
<b>Basic Parameter</b>			
Pixel Pitch	2.6-5.9mm	3.9-7.8mm	
Pixel Structure	1R1G1B	1R1G1B	
Pixel Density	65189 pixels/m <sup>2</sup>	32873 pixels/m <sup>2</sup>	
Module Resolution	192X21	128x16	
Module Size (WxH)	500X125mm	500X125mm	
Cabinet Size (WXH)	1000mmX500mm/1000mmX1000mm	1000mmX500mm/1000mmX1000mm	
<b>Optical Parameter</b>			
Single Point Brightness, Chroma Correction	support	support	
White Balance Brightness	≥2500cd/m <sup>2</sup>	≥2000cd/m <sup>2</sup>	
Color Temperature	2000K—12500K Adjustable	2000K—12500K Adjustable	
Horizontal Viewing Angle	140 Deg.	140 Deg.	
Vertical Viewing Angle	140 Deg.	140 Deg.	
Visible Distance	5+ m	5+ m	
Brightness Uniformity	≥97%	≥97%	
Contrast Ratio	≥5000:1	≥3000:1	
<b>Process Performance</b>			
Signal processing bits	16 bits*3	16 bits*3	
Gray scale	12-16 Bit	12-16 Bit	
Control Distance	Cable: 100 m, Optical Fiber: 10km	Cable: 100 m, Optical Fiber: 10km	
Drive Mode	constant current source driver	constant current source driver	
Frame Rate	≥60HZ	≥60HZ	
Refresh Rate	1920-3840 HZ	1920-3840 HZ	
Way to Control	Synchronize	Synchronize	
Brightness Adjustment Range	0-100 Stepless Adjustment	0-100 Stepless Adjustment	
<b>Usage Parameter</b>			
Continuous Operation Time	≥72h	≥72h	
Expected LED Lifetime(Max)	>100,000 hours	>100,000 hours	
IP Rating	IP20	IP20	
Operating Temperature	-20 °C to 50 °C	-20 °C to 50 °C	
Operating Humidity	10 %- 80% RH No Condensation	10 %- 80% RH No Condensation	
Storage Temperature	-20 °C to 60 °C	-20 °C to 60 °C	
<b>Electrical Parameter</b>			
Operating Voltage	DC4. 5-5V	DC4. 5-5V	
Power Requirements	AC: 220× (1±10%) V、50× (1±5%) Hz	AC: 220× (1±10%) V、50× (1±5%) Hz	
Maximum power consumption	800W/m <sup>2</sup>	800W/m <sup>2</sup>	
Average power consumption	260W/m <sup>2</sup>	260W/m <sup>2</sup>	

# Details



## Pros

- LED transparent display adopts modular design, box size is easy to splicing into various sizes
- Used in stage, auto show, concert, exhibition center, hotel theater, commercial shopping center, etc
- It is suitable for various types of buildings, does not destroy the building facade and structure, and is easy to install
- 60%-75% permeability, ensure indoor ventilation and lighting, while displaying clear images
- The transparent screen has an ultra-thin size and ultra-light module for easy transportation and installation



## Tests

Categories	Item	Reference Standard	Experimental Conditions	Duration Time	Receiving Standard
<b>LED Lamp</b>					
Environmental Experiments	Temperature Cycle	JESD22-A104-A	-40°C~25°C~100°C~25°C 30min, 5min, 30min, 5min	Cycle 100 times	0/50
	Cold & Heat Shock	JESD22-A106	-40°C~100°C 30 min,30min	Cycle 100 times	0/50
	High temperature storage	JIS C 7021 (1977)B-11	Ta=60°C RH=90%	1000 hours	0/50
Lifetime Test	Ambient temperature lifetime tests	JESD22-A108-A	Ta=25°C Test Conditions: Power on and lit	1000 hours	0/50
	High temperature lifetime tests	JESD22-A101	Ta =85°C RH=85% Test Conditions: Power on and lit	1000 hours	0/50
Mechanical Vibration Experiments	Mechanical vibration	MIL-STD-883 Method 2007	20G minutes, 20 to 2000Hz4 cycles, 4 minutes. Each,X,Y,Z	---	0/50
<b>LED Finished Unit Cabinet</b>					
Environmental Storage Experiment	Low temperature storage tests	GB2423.2	Storage at (-40±2)°C for 4h, recovery at room temperature for 4 h,normal display and uniformity without abnormalities and no uncontrolled spots	8 hours	0/50
	High temperature storage tests	GB2423.2	Storage at (60±2)°C for 4h, recovery at room temperature for 4 h, normal display and uniformity without abnormalities and no uncontrolled spots	8 hours	0/50
Ageing Test	Ambient temperature ageing test		Ta=25°C72-hour uninterrupted power-on display playing	72 hours	0/50
	High temperature ageing test	GB2423.2-89	Check every hour for 8h at (40±2)°C.Normal display and uniformity without abnormalities and no uncontrolled spots	8 hours	0/50
Mechanical Vibration Experiments	Mechanical vibration	GB6587.4-86	Vibration frequency 5HZ-55HZ-5HZ, amplitude 0.19mm, 5 minutes	5 min	0/50

## Notes

### Using environment

- This product is an outdoor display; avoid using it in high temperature, high acid/alkali/salt environments.
- Keep away from flammable materials, gases and dusts; the normal operating temperature of this product is -20~50°C, the optimal ambient temperature is -10~40°C.
- Avoid storage in high temperature, high humidity, high acid/alkali/salt environment; keep away from flammable materials and gases.
- Avoid strong collisions and sharp objects during transport.

### Operations

- This product is DC +5V power supply (working voltage: 4.5~5.2V), AC power supply is forbidden; power terminals are forbidden to be reversed.
- If the product is faulty during the warranty period, please send it back to our company for repair, or repair it under the guidance of our after-sales staff.
- during dismantling/assembly of the product, be sure to operate with care and avoid tools hitting the product.
- lightning and static protection should be done during operation and use; the box and steel structure should be earthed
- the product should not be switched on and off continuously during use; at least 1 minute should elapse between operations
- this product should not be turned off for a long time, it is recommended to use it once in half a month with 4 hours of power on; in high humidity environment, it is recommended to use it once in a week with 4 hours of power on.
- This product is not allowed to play the highest brightness all-white screen for more than half an hour, it is recommended to play dynamic video mainly.

### Cleaning

- If cleaning the module surface, please use a soft bristle brush and brush gently. Do not use any liquid substances to clean the surface of the LED module, as this may damage the SMD-LED.

### Moisture-proof and storage requirements

- After opening the package, the product must be stored in the temperature <30°C and humidity <60% environment.
- If the screen is not used for more than 3 days, please use the pre-lighting method first: 30%-50% brightness for 4-8 hours, and then adjust it to normal brightness (80%-100%) to light up the screen, for eliminating the moisture and normal operation.
- If the screen is not used for more than 7 days, please use the pre-lighting method first: 30%-50% brightness for more than 12 hours, and then adjust it to normal brightness (80%-100%) to light up the screen, for eliminating the moisture and normal operation.

- More than 3 days, LED screen (30%-50% in brightness) pre-lit 4-8 hours
- More than 7 days, LED screen (30%-50% in brightness) pre-lit more than 12 hours

#### The operation process is as follows:

