

PRODUCT SPECIFICATION

Product name : GKGD Smart Screen
Production unit : Shanxi Hi-tech Huajie
Optoelectronics Technology Co., Ltd.
Product series : SE
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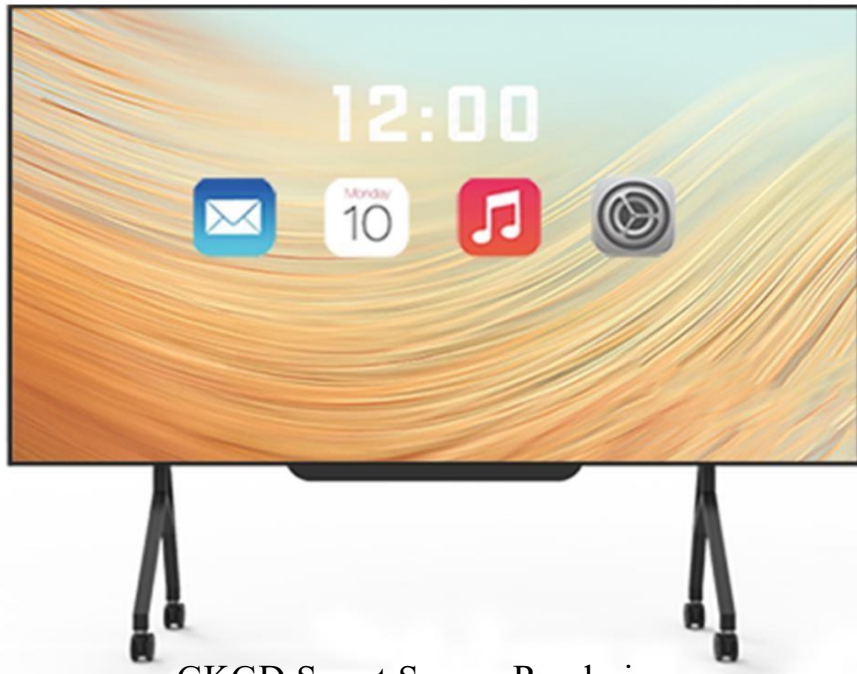
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Applicable scope

This product specification sheet is only applicable to all GKGD Smart Screen SE series products.

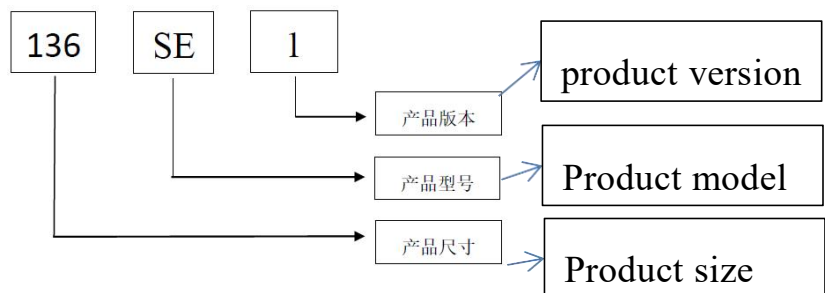
Product Description

The GKGD smart screen is assembled from a 600 * 337.5 size (standard 16:9) display box, with pixel spacing including P1.25/1.5625/1.875. It is hard connected and has a front maintenance solution, and can be assembled into a 2K resolution smart screen.



GKGD Smart Screen Renderings

Specification and model definition



for example: 136 SE1

Technical parameter:

Number	Product model		108 SE2	136 SE2	163 SE2
1	Display parameters	Display resolution	2K	2K	2K
2		Display screen size (inches)	108	136	163
3		display scale	16:09	16:09	16:09
4		Panel process	SMD GOB	SMD GOB	SMD GOB
5		Pixel spacing (mm)	1.25	1.5625	1.875
6		Refresh frequency (Hz)	≥3840	≥3840	≥3840
7		Brightness/nit	≥500	≥500	≥500
8		Color temperature/k	2000K-9300K	2000K-9300K	2000K-9300K
9		contrast ratio	≥5000:1	≥5000:1	≥5000:1
10		Perspective (horizontal/vertical)	170°/170°	170°/170°	170°/170°
11		Grayscale level (bit)	≥14	≥14	≥14
12		Peak power consumption (W/h)	2000	2500	3600
13	Structural parameters	Screen material	Aviation grade alloy	Aviation grade alloy	Aviation grade alloy
14		Screen size (mm)	2400*1350	3000*1687.5	3600*2025
15		Screen thickness (mm)	33.5	33.5	33.5
16		Infrared border width (mm)	20.8	20.8	20.8
17		Regular border width (mm)	5	5	5
18		Connection method	Hard connection	Hard connection	Hard connection
19		Maintenance methods	Pre maintenance	Pre maintenance	Pre maintenance
20		Installation method	Mobile/wall mounted	Mobile/wall mounted	Mobile/wall mounted
21		Screen height above ground (mm)	600	600	600
22		operating system	Android 11	Android 11	Android 11
23	system parameter	control mode	Bluetooth remote control	Bluetooth remote control	Bluetooth remote control
24		Wifi	2.4G/5G	2.4G/5G	2.4G/5G
25		Bluetooth	BT5.0	BT5.0	BT5.0
26	authentication		CCC、CE、FCC	CCC、CE、FCC	CCC、CE、FCC
27	Optional configuration		Infrared touch control		
28			Screen projector (2.4G+5G dual band WiFi)		
29			Camera (4K pixels)		
30			Conference terminal (10-20x optical zoom camera, 5-15m pickup wireless omnidirectional microphone)		
31			OPS (Windows 系统)		

Interface Definition:

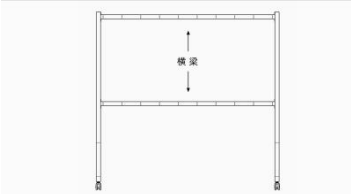
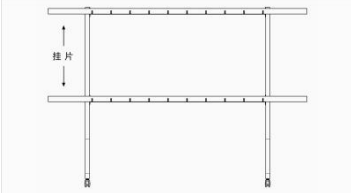
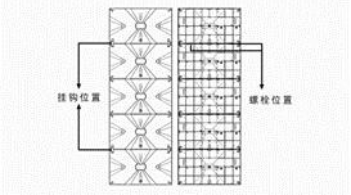
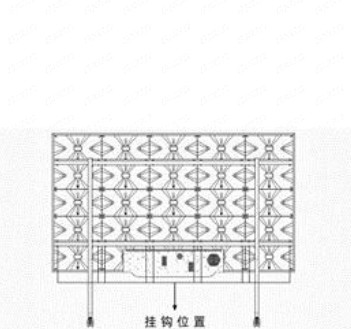
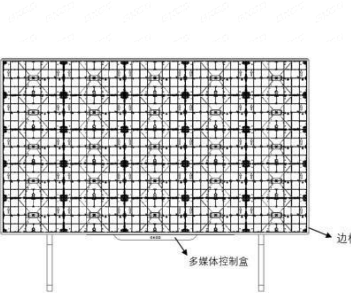
interface	function	quantity
USB	Connecting USB devices such as USB drives and portable	2
HDMI	Image transmission interface	2
AUDIO	Audio input interface	1
RG45	network interface	1
SPDIF	Fiber optic digital audio output	1


Key Definition:

Keys	function
BL+	Brightness increase
BL-	Brightness decrease
VOL+	Volume increase
VOL-	volume down
SOURCE	Source switching
POWER	Power switch


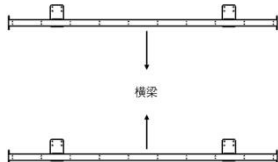
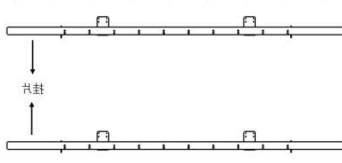
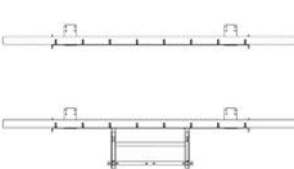
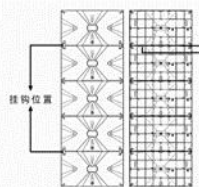
GKGD Smart Screen Installation Guide

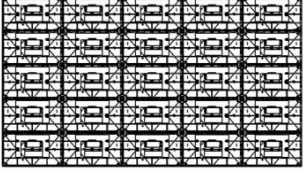
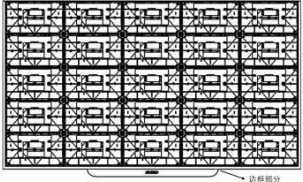

step	Diagram	explain	
Step 1		Installin g casters	Install the casters onto the mobile bracket

<p>Step 2</p>		<p>Install the crossbeam</p>	<p>Fix the crossbeam to the vertical beam with M8 screws</p>
<p>Step 3</p>		<p>Installin g hanging pieces</p>	<p>Fix the hanging plate on the crossbeam with M6 screws</p>
<p>Step 4</p>		<p>Box assembly</p>	<p>Connect 5 (one row) boxes on the countertop with bolts and install hooks</p>
<p>Step 5</p>		<p>Box installat ion to bracket</p>	<p>Hang the assembled column of boxes onto the bracket hanging piece, and hang the column from left to right, and tighten the connecting screws between the columns. The first and second rows from bottom to top, as well as the fourth and fifth rows of boxes, contain box installation hooks between them</p>
<p>Step 6</p>		<p>Install border and multimed i a control box</p>	<p>Fix the infrared border and multimedia control box around the box (note: the internal components, wires, infrared PCBA, and transparent strips of the multimedia control box should be installed in advance on the countertop)</p>

Step 7		Install network and power cables	Connect the network cable and 220V power cord, test and confirm that there is no short circuit, then power on. Use the remote control to turn on the power and check if the receiving card of each box flashes normally. After that, install the module and complete the installation.
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Wall mounted installation method

Step	Diagram	explain	
Step 1		Install wall hanging hooks	Fix the wall hanging hook to the wall using M8 expansion screws according to the drawing coordinates
Step 2		Install the crossbeam	Hang the crossbeam onto the wall hanging hook according to the hole position
Step 3		Installing hanging pieces	Fix the hanging plate on the crossbeam with M6 screws
Step 4		Install the control box bracket	Fix the control box bracket to the lower crossbeam using M6 screws
Step 5		Box assembly	Connect 5 (one row) boxes on the countertop with bolts and install hooks

<p>Step 6</p>		<p>Box installation to bracket</p>	<p>Hang the assembled column of boxes onto the bracket hanging pieces, one column from left to right, and tighten the connecting screws between the columns. The first and second rows from bottom to top, as well as the fourth and fifth rows of boxes, contain box installation hooks between them</p>
<p>Step 7</p>		<p>Install the border and control box</p>	<p>Fix the border part around the box (note: the internal components, wires, infrared PCBA, and transparent strip of the multimedia control box should be installed in advance on the countertop)</p>
<p>Step 8</p>		<p>Install network and power cables</p>	<p>Connect the network cable and 220V power cord, test if there is no short circuit, then power on. Use the remote control to turn on the power and check if the receiving card of each box flashes normally. After that, install the module. Finally, install the front cover plate of the multimedia control box to complete the installation</p>

Safety requirements for the use of GKGD smart screens

Installation of electrostatic protection requirements

Strict attention should be paid to static electricity protection during the installation process of GKGD smart screens, and installation personnel must wear grounded static electric wristbands or gloves.

Cleaning requirements

Cleaning the GKGD smart screen requires using a dust-free cloth dipped in alcohol to gently wipe the surface of the screen. Unknown chemical liquids should not be used

to wipe to avoid damaging or corroding the LED beads on the screen surface, causing abnormal display. After cleaning, wait for the surface of the screen to completely dry before using it with electricity.

Maintenance requirements

If the user discovers abnormal display during use, please immediately turn off the power and contact after-sales maintenance personnel.

Precautions for using GKGD smart screen

Waterproof and moisture-proof

The smart screen is designed for indoor use, to avoid short circuits and fires caused by dampness or severe moisture, which can lead to malfunctions and fires, resulting in losses.

Environmental temperature requirements

When the smart screen is working, it will generate a certain amount of heat. If the ambient temperature is too high and the heat dissipation is poor, there is a risk of integrated circuit failure, which can seriously lead to burning, thus preventing the display system from working properly. To ensure stable work, it is recommended to use the product in an environment with a temperature of $-20\text{ }^{\circ}\text{C}\sim 40\text{ }^{\circ}\text{C}$ and a humidity of 10% -60% RH.

Display content requirements

To avoid the issue of LED attenuation uniformity caused by long-term static images, it is recommended that users do not display static images or text for a long time, but instead play scrolling images or text.

Power connection requirements

When wiring the power supply, it is necessary to ensure that the smart screen plug is reliably connected to the socket to avoid wire burning or product damage caused by

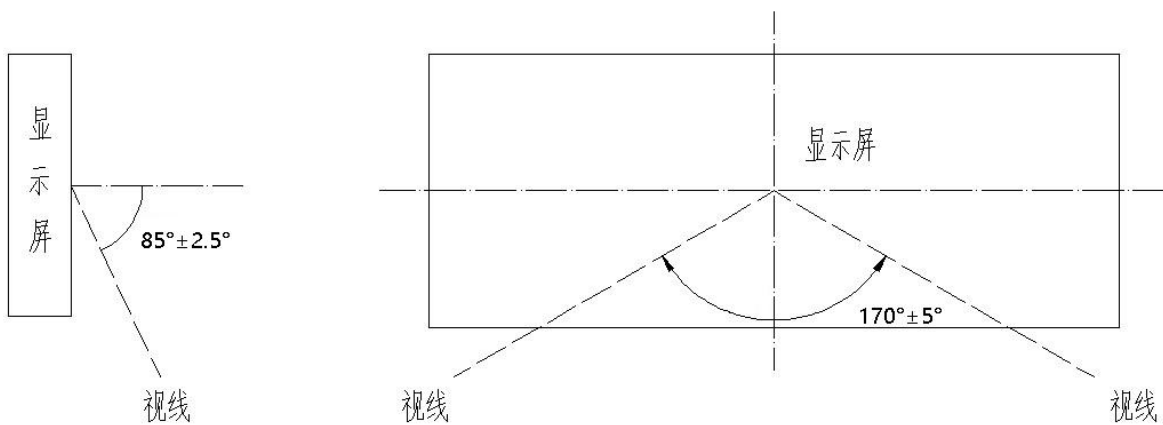
GKGD Smart Screen Acceptance Requirements and Methods

Smart screen brightness acceptance

Set the display screen to fully lit state and use a brightness meter to complete the brightness measurement of the display screen within 5 minutes. When measuring brightness, it is required that the optical axis of the brightness meter is perpendicular to the screen body. Adjust the distance between the brightness meter and the display screen to ensure that the black dots or circles inside the brightness meter eyepiece cover more than 16 pixels. Adjust the focal length so that the LED beads can be clearly seen inside the eyepiece. Then measure and read the brightness data.

Visual angle acceptance

As shown in the figure below, when viewed from the 85° position on the left and right sides of the screen, and from the 85° position below the display screen, it is required that there are no obvious black spots or dark blocks on the screen.



viewing angle

Handling abnormal display of GKGD smart screen during use

If the user discovers abnormal display, especially if there is a whole row of high brightness, the entire screen should be immediately powered off for maintenance to avoid prolonged power supply in this situation.