

Product Specification Sheet

Product Series: Unite Series All-in-one Display

Product Model: LCXXSNPXXXU

Document Revision History

No	Revision No.	Change Status	Description of Changes (+/-)	Approved By	Date
1	V1.0	C	Creation	Joyce Dong	2025.12.16
2	V1.0	M	Modification	Gloria	2026.06.08
3	V1.0	M	Modification	Lynn	2026.06.09

*Note on Change Status: C——Creation, A——Addition, M——Modification, D——Deletion

Disclaimer: This document outlines the technical parameters for the standard model within this series.
The actual product specifications may vary based on the configuration specified in the sales contract.
The images provided are for illustrative purposes only, the actual product may differ.

This document provides the technical specifications and images for the standard model, serving merely as a reference. The actual terms and details shall be governed by the contract.

Contents

1. Scope of Application..... - 1 -

2. Naming Rules..... - 1 -

3. Product Introduction..... - 1 -

4. Product Parameters..... - 4 -

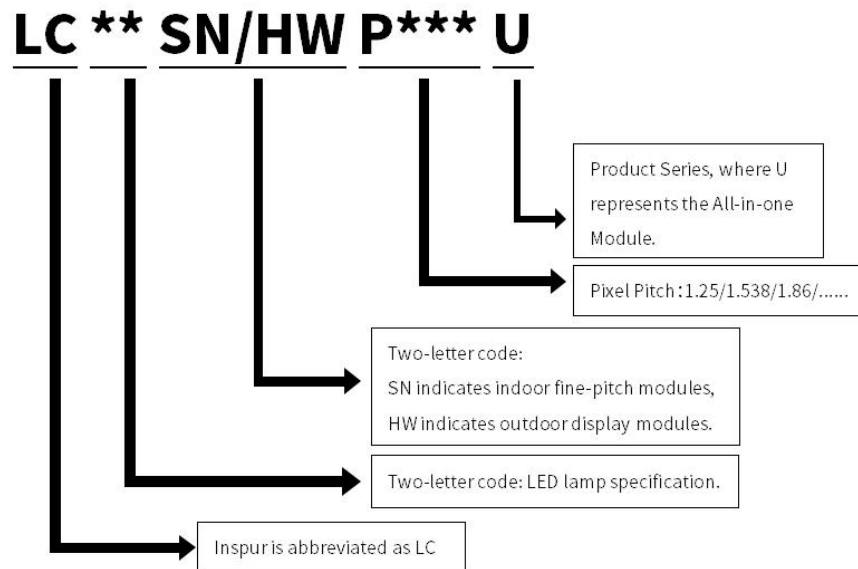
5. Unit Board Signal Interface Definition..... - 5 -

6. Precautions..... - 5 -

1. Scope of Application

This specification applies to the LAC Vision Unite Series indoor All-in-one Display, featuring 320×240 modules. Unless otherwise specified, any subsequent reference to "the product" in this document denotes the Unite Series indoor All-in-one Display. The content described herein represents typical values for the standard product. Customization is available based on actual requirements.

2. Naming Rules



Example: LC10SNP125U represents the LAC Vision Unite Series indoor All-in-one Display, with an LED lamp specification of SMD1010 and a pixel pitch of 1.25mm.

3. Product Introduction

LAC Vision Unite Series All-in-one Display adopts an integrated design, incorporating the power supply and receiver card into a single unit. Factory pre-assembled with no on-site secondary splicing required, it enables rapid large-screen deployment. The 320×240mm large-format modules, reinforced with internal ribs, deliver superior screen flatness and exceptional stability. An innovative circuit design ensures

This document provides the technical specifications and images for the standard model, serving merely as a reference. The actual terms and details shall be governed by the contract.

uniform heat distribution, effectively resolving cyan-shift issues. With high brightness, high refresh rate, and high grayscale capabilities, it produces images with fine detail, authentic textures, and true-to-life, vivid colors. Its ultra-wide viewing angle guarantees excellent display quality from any perspective. It is widely applicable in government and enterprise offices, exhibitions, retail, commercial real estate, and other fields, effectively supporting visual presentation and information delivery across diverse scenarios.



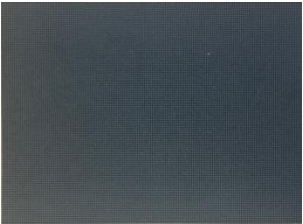
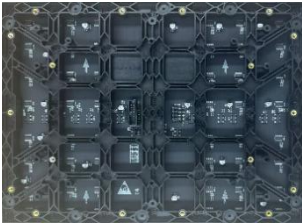
3.1 Product Features

- **320×240mm Large-Size Module Design:** Delivers superior flatness and enhances efficiency in both SMT (Surface Mount Technology) production and field installation.
- **Innovative Circuit Design:** Ensures uniform thermal distribution across modules, eliminating cyan-shift issues.
- **3840Hz High Refresh Rate:** Prevents scanning lines and moiré patterns during camera capture, producing smoother and more detailed imagery.
- **14-Bit High Grayscale:** Provides distinct luminance gradations and rich image detail for enhanced picture depth.
- **Wide Viewing Angles:** 160° horizontal and 140° vertical, guaranteeing excellent display quality from various perspectives.

This document provides the technical specifications and images for the standard model, serving merely as a reference. The actual terms and details shall be governed by the contract.

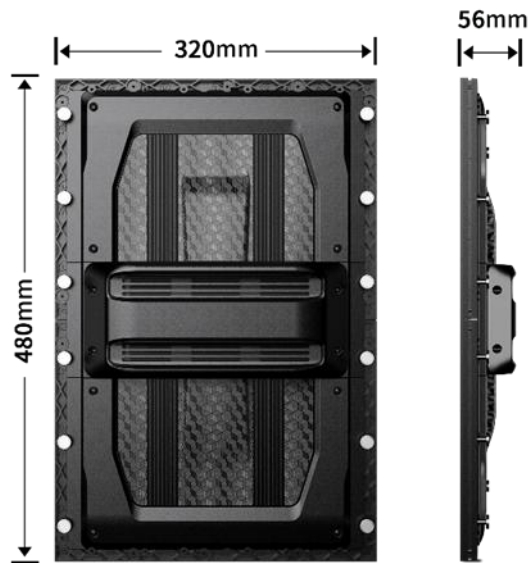
- **Lightweight Chassis Design:** Net cabinet weight of 2.1-2.2 kg enables single-person handling and assembly, reducing transportation and setup costs.
- **Magnetic Mounting System:** Facilitates rapid large-screen deployment with simple and efficient operation.
- **Welding-Free Steel Framework:** Allows flexible configurations in length and height to accommodate most application scenarios.
- **Optional Die-Cast Aluminum Cabinet:** Available for individual modules, offering greater installation flexibility.

3.2 Module Images

Front (320×240mm)	Back (320×240mm)
	

This document provides the technical specifications and images for the standard model, serving merely as a reference. The actual terms and details shall be governed by the contract.

3.3 Product Dimensions



Note: Large-size modules can be used individually with die-cast aluminum cabinets. If required, please consult the Product Department before placing your order.

4. Product Parameters

Unite Series Indoor All-in-one Display					
Model	LC10SN P125U	LC12SN P1538U	LC15SN P186U	LC15SN P20U	LC20SN P25U
LED Package	SMD1010	SMD1212	SMD1515	SMD1515	SMD2121
Pixel Pitch (mm)	1.25	1.538	1.86	2.0	2.5
Scan Mode (S)	1/96	1/104	1/86	1/80	1/64
Cabinet Resolution (W×H)	256×384	208×312	172×258	160×240	128×192
Cabinet Size (mm)	320×480×56				
Cabinet Weight (kg)	2.1~2.2				
Brightness (nit)	≤500				
Refresh Rate (Hz)	3840				
Grayscale (bit)	14				
Viewing Angle	Horizontal 160°, Vertical 140°				

This document provides the technical specifications and images for the standard model, serving merely as a reference. The actual terms and details shall be governed by the contract.

AC Operating Voltage (V)	100~240
Protection Rating	IP40/IP21
Maximum Power (W/m ²)	330
Average Power (W/m ²)	110
Operating Temperature/Humidity Range	-10°C~60°C/10%-80%RH (No Condensation)
Storage Temperature/Humidity Range	-40°C~60°C/10%-85%RH (No Condensation)

5. Unit Board Signal Interface Definition

Pin	Signal	Function	Pin	Signal	Function	
1	G1	Green Data Signal	2	R1	Red Data Signal	1 ● ● 2
3	GND	Power Ground	4	B1	Blue Data Signal	3 ● ● 4
5	G2	Green Data Signal	6	R2	Red Data Signal	5 ● ● 6
7	HE1	Row Decode Signal	8	B2	Blue Data Signal	7 ● ● 8
9	HB1	Row Decode Signal	10	HA1	Row Decode Signal	9 ● ● 10
11	HD1	Row Decode Signal	12	HC1	Row Decode Signal	11 ● ● 12
13	HLAT1	Latch Signal	14	HDCLK1	Shift Clock	13 ● ● 14
15	GND	Power Ground	16	HOE1	Display Enable Signal	15 ● ● 16

Note: The unit board signal interface definition is for reference only and may vary across different product models.

6. Precautions

Item	Description
Operating Temperature Range	Ambient Temperature: -10°C to +60°C. Temperature control equipment is required if the ambient temperature falls outside this range to ensure it remains within allowable limits. LED Module Surface Temperature (During Operation): ≤60°C. Temperature control equipment is required if this temperature limit is exceeded.
Storage Temperature Range	Ambient Temperature: -40°C to +60°C. Temperature control equipment is required if the ambient temperature falls outside this range to ensure it remains within allowable limits.
Operating Humidity Range	10% to 80% RH. Dehumidification of the operating environment is required if the humidity level exceeds this limit to ensure normal operation.
Storage Humidity	10% to 85% RH. If the humidity exceeds 80% RH, dehumidification measures must be

This document provides the technical specifications and images for the standard model, serving merely as a reference. The actual terms and details shall be governed by the contract.

Range	implemented.
Handling of Overdue Storage	An aging process is required before initial use if the product has been stored in its original, unopened packaging for over one month, or has been powered off for more than 48 hours after unpacking. The aging procedure involves operating the display at progressively increasing brightness levels as follows: begin at 10% brightness for 1 hour, followed by 30% for 1 hour, then 60% for 2 hours, then 80% for 1 hour, and finally 100% brightness for 1 hour. This gradual intensity increase ensures stable performance.
Dust Prevention Requirements	Indoor products have a lower protection rating and should not be exposed to high-dust environments, such as sandy outdoor areas or dusty indoor workshops. Special protective measures for the display cabinets are required.
Corrosion-Resistant Gas Protection	Corrosive gases can cause corrosion and crystal leakage in electronic components.
Electromagnetic Radiation Protection	The display should not be installed in environments where electromagnetic or radio frequency radiation exceeds a field strength of 5V/m.
Anti-static	It prevents damage to electronic components caused by static electricity in humid environments and also avoids electrical leakage that could harm the human body.
Shock Resistance	The display screen should be mounted on a sturdy and reliable installation structure that is free from intense vibrations.
Keep Away from Water Sources	The rear panel has a low waterproof rating and cannot be installed unprotected. Water is conductive and can cause short circuits, leading to component damage. Therefore, keep the unit away from water sources.
Personal Injury Prevention	To prevent personal injury, the modules must be installed at an appropriate angle and height. Additionally, any sharp edges or corners must be covered or padded to prevent injury caused by the rigid cabinet structure.
Safety Requirements	It is essential to ensure the stability of the power supply system, maintaining normal levels of frequency, voltage, and current harmonics. The metal components of the display screen, the housing of the switching power supply, and the enclosure must be properly grounded, with attention given to ensuring that the grounding resistance is $\leq 1\Omega$. Additionally, the leakage current to ground should not exceed 5% of the input current. The electrical strength should comply with the provisions of Section 5.7.5 in the SJ/T11141-2017 General Specification for Light Emitting Diode (LED) Displays.
Others:	This product is designed for standard indoor use. Due to its specific manufacturing process, avoid physical contact to prevent damage.

Note:

The above parameters represent typical values for the product. Variations may occur across different production batches, and the actual parameters

This document provides the technical specifications and images for the standard model, serving merely as a reference. The actual terms and details shall be governed by the contract.

of the product shall be subject to the factory inspection report.

During the product manufacturing process, continuous optimization and iteration are carried out, and the product specifications may be adjusted at any time. Please consult with regional agents before making a purchase.

For customized products, a new specification sheet needs to be issued.

This document provides the technical specifications and images for the standard model, serving merely as a reference. The actual terms and details shall be governed by the contract.