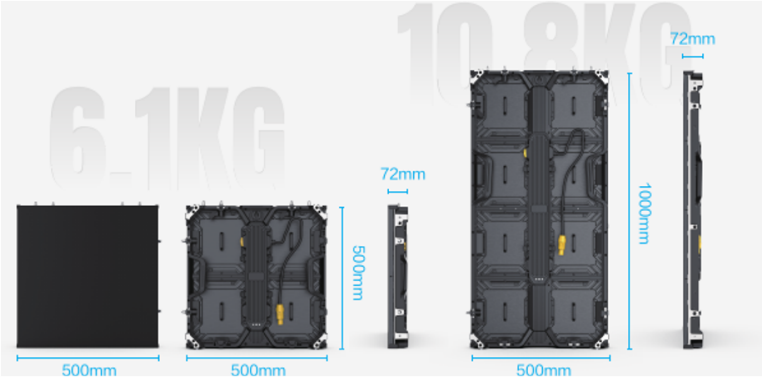
HITU DISPLAY

RENTAL LED DISPLAY SYSTEM SPECIFICATION

Indoor Rental LED Display System

LN2.604-24S-1515-H-7680

LN Series | Hard connection | 7680 Hz



COMPLETE RENTAL DISPLAY

Shenzhen Hantu Jiashi Technology Co., Ltd.

No. 40 Huaning Road, Dalang Subdistrict, Longhua District, Shenzhen, China

Website: https://hitudisplay.com/

CONTENTS

01	Scope and complete-system definition	3
02	Product overview and key features	4
03	Cabinet configuration and calculated loads	5
04	Display and system specifications	6
05	Shared module detailed specifications	7
06	Cabinet structure and mechanical features	8
07	Power, signal and installation guidance	9
08	Inspection, acceptance and contact	10

SCOPE AND COMPLETE-SYSTEM DEFINITION

This document specifies the complete rental LED display system. The 500 x 500 mm and 500 x 1000 mm cabinets share the same LED module platform; their cabinet structure, module quantity, resolution, weight and total electrical load differ.

DOCUMENT SCOPE	
Product	Indoor Rental LED Display System
Complete-system model	LN2.604-24S-1515-H-7680
Series / connection	LN / Hard connection
Operating environment	Indoor
Cabinet formats	500 x 500 x 72 mm / 500 x 1000 x 72 mm
Shared module	250 x 250 mm, 96 x 96 dots
Refresh rate	7680 Hz
Installation	Hanging or floor stacking

1 Shared module

Optical, driving and module electrical parameters are common to both cabinet formats.

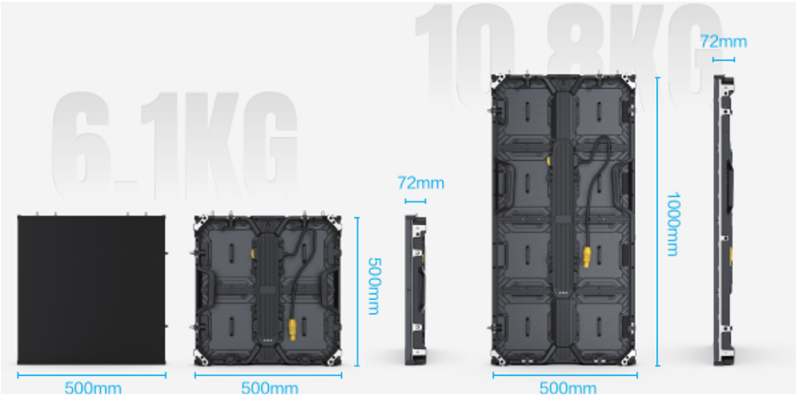
2 Different structure

Cabinet size, weight, installed module count, pixel count and total load are listed separately.

3 Rental use

Fast assembly, repeatable alignment, hanging and floor-stacking support.

PRODUCT OVERVIEW AND KEY FEATURES



COMPLETE SYSTEM / CABINET FAMILY

The LN Series is a modular indoor rental LED display designed around a shared 250 x 250 mm module platform and two compatible cabinet formats.

1. **500 x 500 mm and 500 x 1000 mm cabinets use the same module platform**
2. **Fast-lock die-cast rental cabinet for repeated assembly**
3. **Hard-connection stage-rental architecture**
4. **Maximum hanging quantity: 20 pcs (500 cabinet) / 10 pcs (1000 cabinet)**

PITCH	BRIGHTNESS	SCAN	REFRESH
2.604 mm	600 cd/m2	1/24	7680 Hz

CABINET CONFIGURATION AND CALCULATED LOADS

COMPLETE-CABINET DATA AND LOAD CALCULATION

Parameter	500 x 500 cabinet	500 x 1000 cabinet
Cabinet dimensions	500 x 500 x 72 mm	500 x 1000 x 72 mm
Installed shared modules	4 modules	8 modules
Cabinet resolution	192 x 192	192 x 384 dots
Total pixels	36,864 pixels	73,728 pixels
Display area	0.25 m2	0.50 m2
Cabinet weight	6.0 kg ±10%	10.6 kg ±10%
Maximum cabinet load	90.4 W	161.6 W
Average cabinet load	30.1 W	53.9 W
Cabinet material	Die-cast aluminum	Die-cast aluminum
Protection rating	IP40 front / IP21 rear	IP40 front / IP21 rear

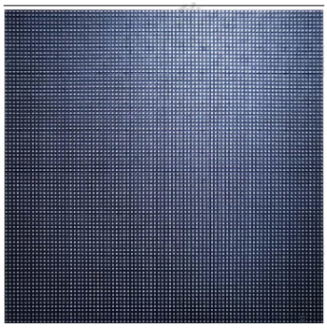
CALCULATION BASIS

Cabinet pixel matrix = cabinet width and height divided by pixel pitch. Installed module count = cabinet area divided by 0.0625 m2 per 250 x 250 mm module. Declared cabinet power values take precedence over theoretical module multiplication.

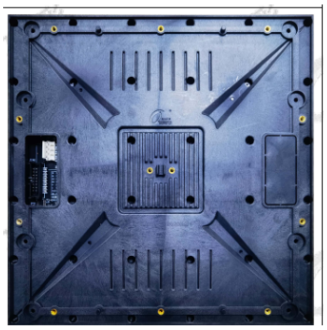
DISPLAY AND SYSTEM SPECIFICATIONS

COMPLETE-DISPLAY OPTICAL AND SYSTEM DATA	
Pixel pitch	2.604 mm
Pixel density	147475 dots/m2
Pixel configuration	1R1G1B
LED package	SMD1515
Brightness	600 cd/m2
Brightness uniformity	>0.95
Contrast ratio	5000:1
Horizontal viewing angle	160±10°
Vertical viewing angle	140±10°
Recommended viewing distance	≥2.604 m
Refresh rate	7680 Hz
Frame rate	≥60 fps
Grayscale	14-16 bits
Display colors	4.398 trillion colors
Operating temperature	-10 to +40°C
Operating humidity	10%-90% RH
Application	Indoor

SHARED MODULE DETAILED SPECIFICATIONS



MODULE FRONT



MODULE REAR / ASSEMBLY

COMMON MODULE PLATFORM

Module dimensions	250 x 250 mm
Module resolution	96 x 96 dots
Module weight	Not specified
LED package	SMD1515
DC input voltage	AC 200-240 V system input
Maximum current	Not specified
Maximum module power	Calculated from cabinet load
Drive / scan method	1/24 constant-current drive
Signal interface	Rental cabinet internal interface
Maximum module power per m2	361.7 / 323.2 W/m2
Recommended distribution capacity	Project-specific

The same module specification is used in both complete-cabinet formats. Cabinet totals vary only because the 500 x 1000 mm cabinet contains twice the module quantity and display area of the 500 x 500 mm cabinet.

CABINET STRUCTURE AND MECHANICAL FEATURES

CABINET STRUCTURE / FORMAT REFERENCE

MECHANICAL CONFIGURATION

Cabinet formats	500 x 500 x 72 mm / 500 x 1000 x 72 mm
Material	Die-cast aluminum
Connection architecture	Hard connection
Module service access	Rear service
Installation modes	Hanging or floor stacking
Protection	IP40 front / IP21 rear

1. Confirm that the support frame is level, rigid and grounded.

2. Engage all positioning pins and fast locks before energizing the screen.

3. Keep cabinet seams uniform; do not force a cabinet into alignment.

4. For outdoor systems, complete project-level waterproofing around the assembled screen.

POWER, SIGNAL AND INSTALLATION GUIDANCE

CABINET POWER AND SIGNAL SUMMARY

Parameter	500 x 500 cabinet	500 x 1000 cabinet
Shared module quantity	4 modules	8 modules
Maximum cabinet load	90.4 W	161.6 W
Average cabinet load	30.1 W	53.9 W
Signal interface	Rental cabinet internal interface	Rental cabinet internal interface
Service access	Rear service	Rear service

RECOMMENDED CONNECTION FLOW

Video processor — Sending system — Receiving card — Shared modules

1. Isolate AC power before connecting or replacing cabinets and modules.
2. Verify protective earth, DC polarity, voltage and connector retention.
3. Distribute circuits from the declared maximum cabinet load, including project safety margin.
4. Power on by section while monitoring current, temperature and image mapping.
5. Separate signal and power routes where practical; protect cables from strain and sharp bends.

INSPECTION, ACCEPTANCE AND CONTACT

COMPLETE-SYSTEM ACCEPTANCE CHECKLIST	
Visual inspection	No damaged LEDs, deformed modules, loose locks, loose connectors or abnormal contamination.
Mechanical check	Cabinet alignment, seams, hanging/floor hardware and service access are complete.
Electrical check	Grounding, polarity, voltage, circuit protection and cable retention have been verified.
Image test	Red, green, blue, white and grayscale patterns show no persistent uncontrolled pixels.
Uniformity	Brightness and color are consistent; calibration data is loaded when required.
System test	Stable operation at 7680 Hz with the project controller and mapping file.
Environmental check	Installation matches indoor use and the declared IP40 front / IP21 rear protection.

SHENZHEN HANTU JIASHI TECHNOLOGY CO., LTD.

Address

No. 40 Huaning Road, Dalang Subdistrict, Longhua District, Shenzhen, China

Website

https://hitudisplay.com/

Document note: confirm project-specific drawings, controller settings and final power distribution before production.