



PRODUCT TECHNICAL SPECIFICATION

Flexible LED Mesh Screen

2020-3D3535RGB-1935

Pixel pitch options: P50 • P62.5 • P83.3 • P100

Transparent • Flexible • Lightweight • Outdoor Rated

IP67

IK08

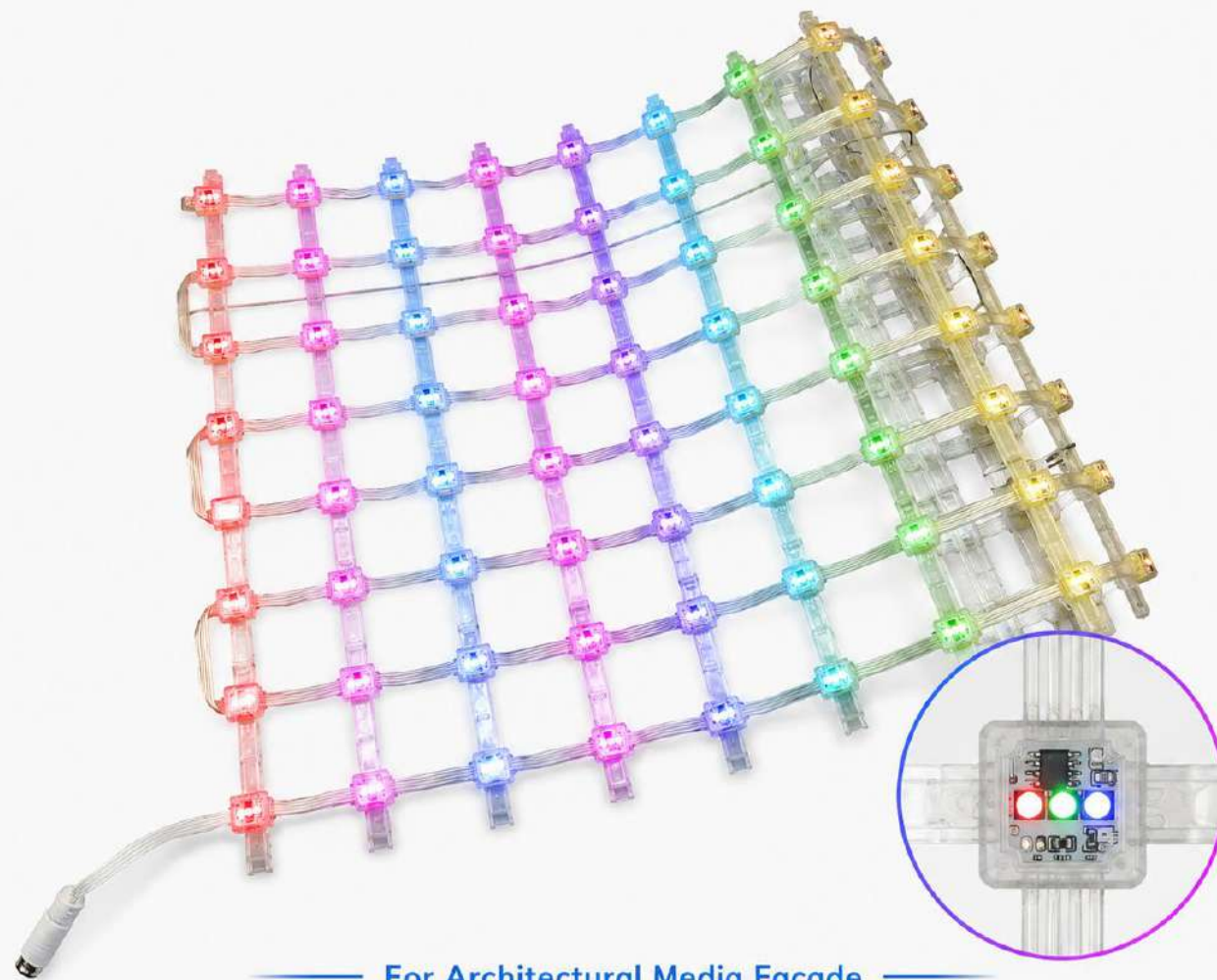
DC12V

DMX512 / SPI

For architectural media façades, commercial buildings and creative LED grid installations

Flexible LED Mesh Screen

Lightweight • Transparent • Programmable RGB • Custom Pixel Pitch



For Architectural Media Facade



General Technical Specifications

Electrical, optical, material and protection parameters.

PRODUCT / MECHANICAL

	2020-3D3535RGB-1935 Base model
Pixel pitch options	P50 / P62.5 / P100
Pixel body size	20 × 20 mm
Housing material	PC
PCB material	FR-4
Wire material	PVC (polyvinyl chloride)
Installation environment	Indoor & outdoor
Electrical safety	/
Certifications	CE / RoHS

OPTICAL / ELECTRICAL

LED color	RGB
LED source	SMD3535 × 3 LED
Beam angle	120°
Viewing angle	Up to 140°
Color resolution	3 × 16-bit
Nominal luminous flux	/lm (stated)
Working voltage	DC 12 V
Rated power / pixel	0.72 W
Control / protocol	DMX512; DMX512 / SPI system



Pixel Pitch & System Configuration Options

Choose spacing according to viewing distance, screen density, load and project budget.

P50
Highest density

400 LED/m² | 288 W/m²

3 kg/m² | Max single line 2 m

P62.5
Balanced density

256 LED/m² | 185 W/m²

2 kg/m² | Max single line 2 m

P100
Lowest density

100 LED/m² | 72 W/m²

1 kg/m² | Max single line 2 m

Parameter	P50		P62.5	P100
Application	Indoor / outdoor		Indoor / outdoor	Indoor / outdoor
Installation	Steel structure support		Steel structure support	Steel structure support
Load conductor	2.0 mm wire, 2/module		2.0 mm wire, 2/module	2.0 mm wire, 2/module
Single module width	0.5 m		0.5 m	0.5 m
Viewing angle	≤ 140°		≤ 140°	≤ 140°
Signal transmission		Cat5e up to 100 m 1 Amplifier	Cat5e up to 100 m 1 Amplifier	Cat5e up to 100 m 1 Amplifier
Display mode	Computer / host sync		Computer / host sync	Computer / host sync

Note: pitch-specific weights above are taken from the detailed option table and should be used for project load estimation.

Product Features & Advantages

Designed for transparent media façades and flexible large-format LED installations.



Transparent LED grid architecture

Suitable for bending, folding, winding, hanging and custom geometric combinations.

TRANSPARENT

FLEXIBLE

LIGHTWEIGHT

1

Long-distance wiring

Expanded line diameter supports longer power and signal transmission for large façades.

2

Flexible installation

Compact pixel size and steel-wire mounting enable multiple structural and creative installation methods.

3

Break-point resume

If one pixel is damaged, downstream pixels can continue receiving data instead of losing the entire line.

4

Reduced failure impact

Signal reception architecture is intended to minimize system failure propagation and simplify maintenance.

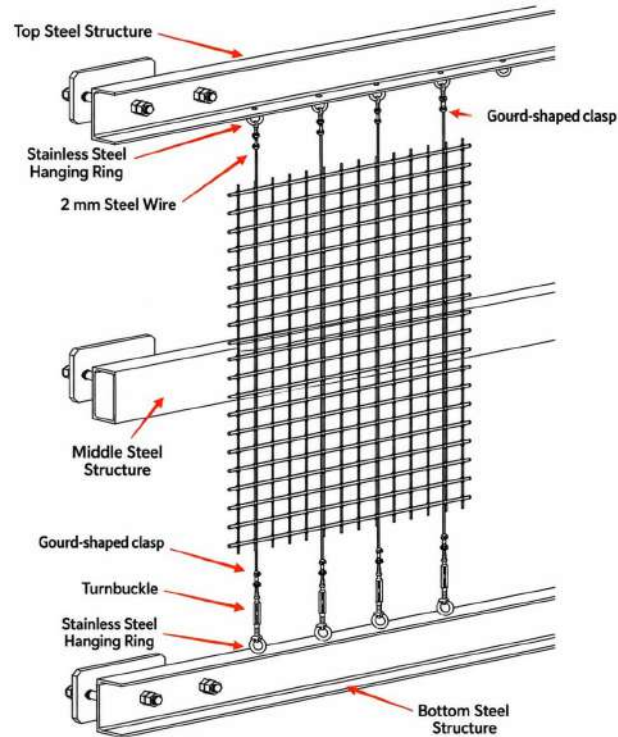
5

Multiple spacing options

P50, P62.5 and P100 configurations allow flexible control of LED density, power load, screen weight and project cost.

Mechanical Installation & Structure

Reference mounting method and material requirements from the supplied installation drawing.



Reference mesh suspension structure

TECHNICAL REQUIREMENTS

- 1 Use stainless-steel chemical bolts to secure structural parts to the exterior wall.
- 2 Welding rod specification: J422 national standard.
- 3 Weld seams require anti-rust treatment and should meet at least national standard level 3.
- 4 Final construction must follow the approved structural deepening / shop drawing.

REFERENCE HARDWARE



Hanger



Clamp



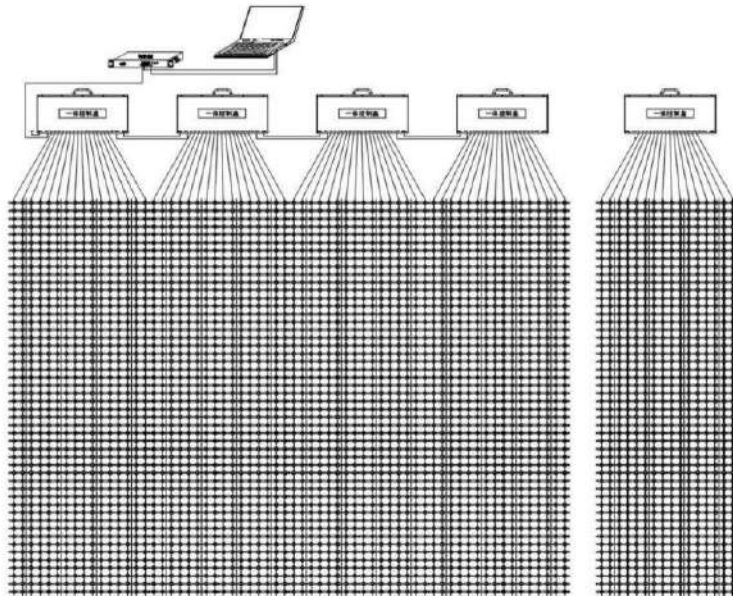
Turnbuckle

Shenzhen Juxuan Lighting Co.,Ltd

Control, Signal & Power Architecture

Recommended system layout for large LED mesh screens.

DISPLAY SYSTEM CONNECTION



Module width

0.5 m

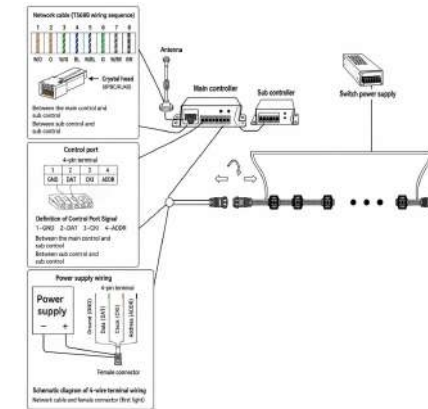
Signal cable

Cat5e

Display mode

Computer / host sync

CONTROLLER CONNECTION



CABLING GUIDELINES

- ≤ 15 m Control port → first lamp using Cat5e oxygen-free copper network cable.
- ≤ 90 m Cat5e signal transmission distance stated for the system.
- Separate Strong-current and weak-current wiring during installation.



Application & Project Configuration

A practical summary for specification, quotation and engineering confirmation.

Transparent by Day. Brilliant by Night.

DAY

High Transparency



NIGHT

Dynamic RGB Media Display



Open mesh structure helps maintain daylight, airflow and facade visibility.

Typical Applications

- Building façades & media façades
- Commercial building entrances
- Creative transparent display walls
- Custom curved / hanging installations

PROJECT CONFIGURATION CHECKLIST

01

Pixel pitch

P50 / P62.5 / P83.3/P100

02

Screen size

Width × height / total m²

03

Structure

Steel support / suspension details

04

Power

DC12V distribution & loading

05

Control

DMX512 / SPI & controller quantity

06

Cabling

Cat5e routes & line lengths

SPECIFICATION SUMMARY

20×20 mm RGB pixel | SMD3535 × 3 | DC12V | 0.72 W/pixel | IP67 | IK08 | DMX512/SPI | -20...60°C

P50: 400 LED/m², 288 W/m², 3 kg/m² · P62.5: 256 LED/m², 185 W/m², 2 kg/m² · P100: 100 LED/m², 72 W/m², 1 kg/m²

Final project values should be confirmed against the approved shop drawing, structural design, power distribution and control-system configuration.