

VF-250 Series Indoor Flexible LED Display Module



1. Scope of application

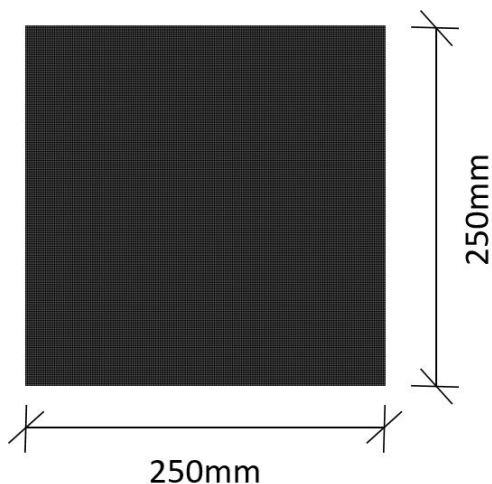
This specification applies only to 250mm x 250mm module sizes (hereinafter referred to as "VF-250 series" products), with a pixel pitch of P1.953mm, and can be spliced with internal and external display curved screens, cylindrical screens, curved screens and other displays;

2. Main technological features

- The module features a standardized size design of 250mm x 250mm, offering high flatness, high protection, high brightness, high refresh rate, and low power consumption.
- The module features a fully covered back cover, providing high protection and reliability. The drive surface is IP20, dustproof, and offers enhanced moisture resistance, protecting against external damage such as rats and cockroaches.
- The entire series is suitable for cylindrical screens and curved screens with internal and external displays. Application scenarios include: planning museums, science and technology museums, urban planning museums, art museums, museums, creative centers, etc.

- The module comes with 32 magnets, which fit perfectly with the cabinet, effectively improving the flatness of the screen and the user experience, and making the inner and outer curved effects better.
- The module is only 4.5mm thick, featuring an ultra-thin and lightweight design that takes up little space.

3. Soft module appearance display



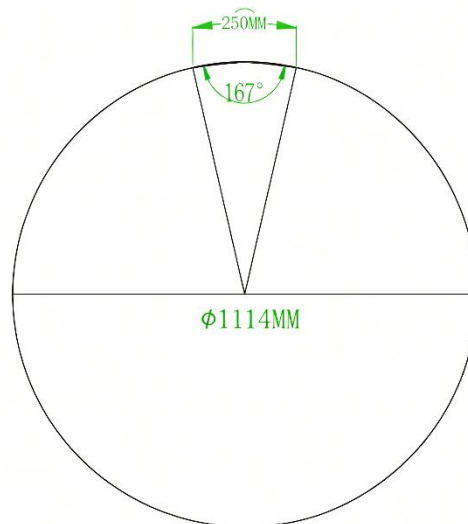
Module flexibility demonstration



Drive surface protection IP20

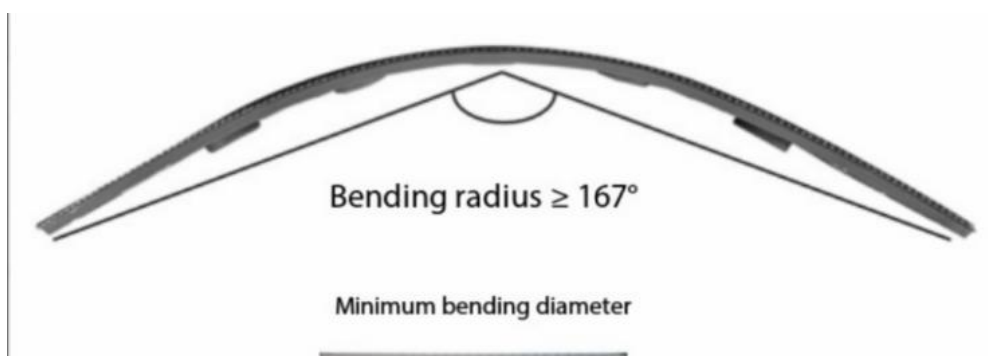
4. Soft module bending curvature

The inner and outer arcs are composed of 14 modules, with a minimum cylinder diameter of 1114mm.



Minimum bending diameter

- Module bending curvature diagram: Inner and outer arcs can be bent $\geq 167^\circ$



5. Product Parameters

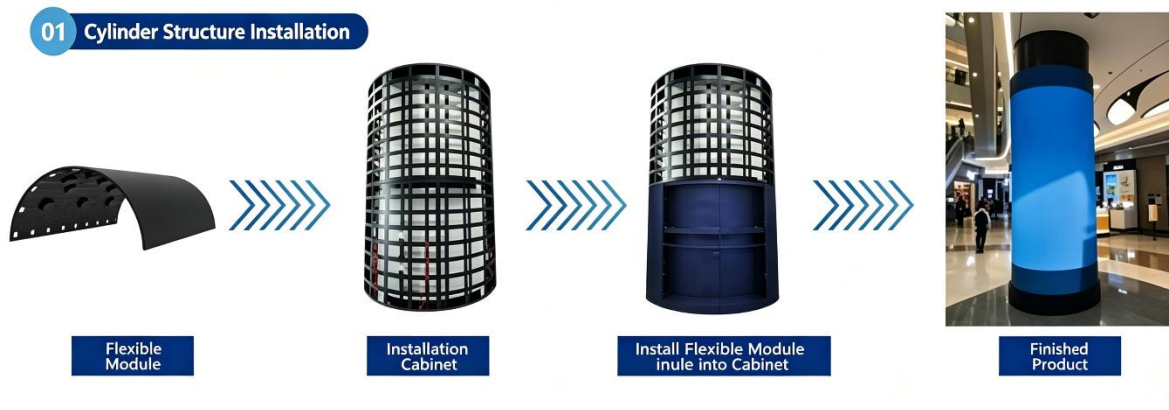
Model		P1.5625	P1.953	P2.604
Technical parameters	Pixel Configuration	1R1G1B (Full color)	1R1G1B (Full color)	1R1G1B (Full color)
	LED Chip Packaging Specifications	SMD1212	SMD1515	SMD1515
	Pixel Density (dots/m ²)	409600	262144	147456
	Module Size (mm)	250 x 250 x 4.5 (Length x Height x Thickness)	250 x 250 x 4.5 (Length x Height x Thickness)	250 x 250 x 4.5 (Length x Height x Thickness)
	Module Resolution	160×160	128×128	96×96
	Scanning Method	40 scans	32 scans	32 scans
	Refresh Rate (Hz)	3840hz	3840hz	3840hz-7680hz
	Frame Rate (Hz)	60hz	60hz	60hz
	Grayscale Level (bit)	14bit	14bit	14bit
	Assembly Diameter	φ1114mm	955mm	637mm
	Bending Radius	≥167°	≥165°	≥158°
	Signal Interface Type	HUB75 (without cascading interface)	HUB75 (without cascading interface)	HUB75 (without cascading interface)
	Module Base Material	Silicone soft base	Silicone soft base	Silicone soft base
	Module Weight (g/pcs)	345g	355g	288g
	Module Flatness (mm)	≤ 0.3 mm	≤ 0.3 mm	≤ 0.3 mm
	Installation/ Maintenance Method	Front or rear installation/maintenance	Front or rear installation/maintenance	Front or rear installation/maintenance

Optical parameters	Brightness (cd)	600cd	700cd	600-650cd
	Color Temperature (K)	6500K-12000K adjustable	6500K-12000K adjustable	6500K-12000K adjustable
	Coordinates	X:0.2500 Y:0.3000 ± 0.01	X:0.2500 Y:0.3000 ± 0.01	X:0.2500 Y:0.3000 ± 0.01
	Horizontal/Vertical Viewing Angle	X:150° / Y:120°	X:150° / Y:120°	X:150° / Y:120°
	Contrast Ratio	6000:1	6000:1	6000:1
Electrical parameters	Module power supply voltage DC (V)	5V	5V	5V
	Module maximum current DC (A)	7A	6A	6A
	Module maximum power consumption (W/sheet)	35 w	30 w	30 w
	Operating input voltage AC (V)	220 V	220 V	220 V
	Peak power consumption (W/m2)	585 w	500 w	500 w
Use	Average power consumption (W/m2)	205w	175w	175w
	Typical lifespan (hours)	100 000 h	100 000 h	100 000 h

parameters	Operating ambient temperature/humidity	-10—40℃, 20%—85%RH non-condensing	-10—40℃, 20%—85%RH non-condensing	-10—40℃, 20%—85%RH non-condensing
	Storage ambient temperature/humidity	-40—60℃, 20%—80%RH non-condensing	-40—60℃, 20%—80%RH non-condensing	-40—60℃, 20%—80%RH non-condensing
Function	FLASH storage function	Supported (optional)	Supported (optional)	Supported (optional)

6. Installation

6.1 Installation diagram



6.2 Installation details and precautions

1. Handle with care to avoid drops and collisions. Avoid squeezing or bumping the edges of modules during assembly. Use vacuum suction cups for disassembly.
2. Wear anti-static gloves before touching the display screen or modules. Do not touch directly with your hands.
3. Do not wipe or violently strike the modules with hard or sharp objects. Plug and unplug cables gently.
4. Sheet metal spray-painted cabinets or higher precision structures are recommended. Using galvanized iron square tubing will affect assembly accuracy.
5. The installation area must be well-ventilated. If necessary, install an air conditioner

behind the screen.

6. Keep the display screen away from moisture, corrosive acids and alkalis, strong vibrations, and strong magnetic fields. Do not place the display screen directly facing the air conditioner vent.

7. Modules must be separated by protective layers. Do not stack them without layers or place them directly on the ground.

8. The bending angle of the modules should be between 167° and 180° . Do not subject the modules to repeated bending.

9. Protect the modules from rain and sun. Avoid rain and immersion. 10. Use a separate grounding wire to ensure the display screen is safely grounded.

11. Power must be turned off before installation/disassembly/maintenance; live operation is prohibited.

12. Operating environment: Temperature $-10^{\circ}\text{C}\sim 40^{\circ}\text{C}$, Humidity 20%~85%RH.

13. Storage conditions: Temperature $-40^{\circ}\text{C}\sim 60^{\circ}\text{C}$, Humidity 20%~80%RH.

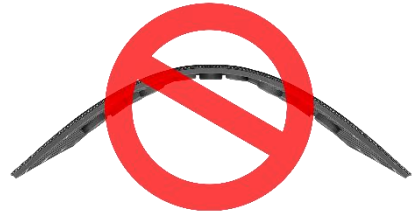
14. When cleaning dust, do not use a cloth, moist objects, or hard objects. Use an anti-static soft brush.

15. If you have any questions about the application, please consult the manufacturer. The manufacturer is not liable for any consequences arising from failure to comply with this instruction manual or improper or unsafe use.

*This document is subject to change from time to time. We reserve the right to modify the specifications without notice. Please contact our service team for the latest information.



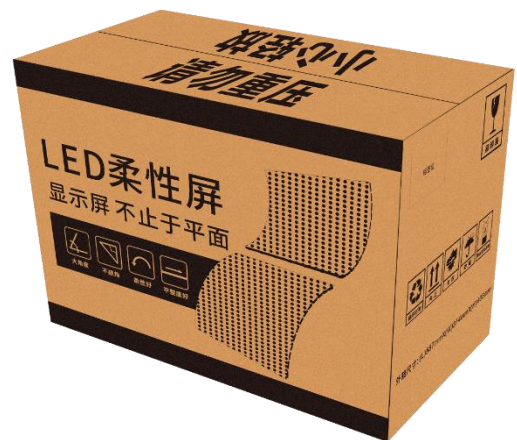
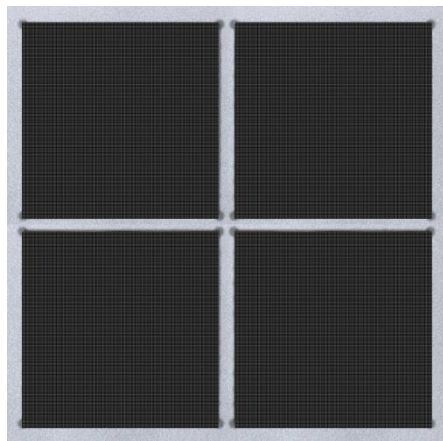
Safe operating angle range: 167° ~180°



Forced bending is prohibited

7. Packaging

Module dimensions (mm)	Outer box dimensions (mm)	Number of modules (pcs)	Weight of the whole box (KG)
250X250	External dimensions: 570 x 570 x 345 mm Length x Width x Height	64	23±0.5



8. Flexible application scenarios

