



Product specification

Indoor TBC-P1.25 Soft module

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Contents

Content	2
1. Introduction to LED Flexible Screen	3
2.Main Process Characteristics	3
3.Appearance Display of Soft Module	4
4.Bending Radius of Soft Module	5
5.Product Parameters	6
6.Module Hole Position Diagram	7
7.Installation	7
7.1 Installation Schematic Diagram	7
7.2 Precautions for Installation Details	8
8.Accessories of Module Cabinet	9
9.Packaging Method	10
10.Flexible Application Scenarios	10

1. Introduction to LED Flexible Screen

- The flexible LED display module is ingeniously invented based on the concept of soft light strips to design a bendable LED module. The flexible LED display module can be spliced into arc screens, cylinders, curved surfaces and other displays according to installation requirements. It is a technological improvement with outstanding characteristics and display progress. Compared with the traditional flat hard module, it incorporates the design concepts of flexibility and large angles, breaks the traditional technical system, shows soft and graceful curves, conquers various artistic shapes with "softness", creates wonderful visions for the audience and vividly presents more colorful visual effects!

2. Main Process Characteristics

- The module is designed with standardized dimensions of 320X160mm, featuring low current, low heat, high contrast and high refresh rate.
- The XR soft module series is suitable for artistic shapes such as cylindrical screens, spiral screens, wave screens and ribbon screens. Application scenarios include planning museums, science and technology museums, urban planning museums, art museums, museums, creative centers, etc.
- The cabinet structure adopts a high-strength sheet metal sandblasted iron cabinet. The unique segmented splicing process effectively reduces the splicing gap of the screen body.
- The module is installed by strong magnetic adsorption. The height of the magnet is adjustable, improving the flatness of the entire screen. The power supply is designed for front maintenance. In special scenarios, front installation can be achieved. With specific tools, front maintenance can be satisfied.
- The PCB board adopts a flexible soft board, and the bottom case is made of silicone material, with good flexibility and static electricity prevention.
- The module is only 8.6mm thick, with an ultra-thin and lightweight design, occupying little space.
- The PCB board is welded with copper pillars and uses a back adhesive method to form a lockable iron seat with the bottom case, making the module more firmly and reliably.
- A single board is equipped with 18 magnets, and each magnet has a magnetic flux density of up to 2000 GS, solving the problems of degumming and warping of ordinary soft modules and effectively improving the flatness and usage effect of the screen body.

3.Appearance display of soft module



Front view of module



Rear view of module



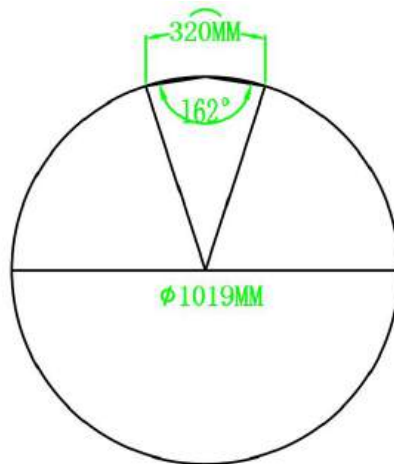
Flexibility display of module



The height of magnets can be adjusted to improve the flatness of the entire screen.

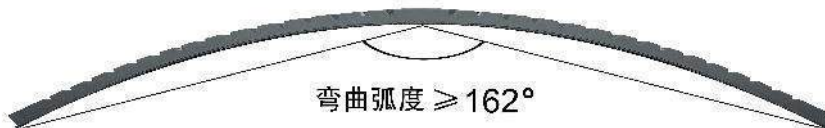
4. Bending radius of soft module

- For the inner and outer arcs, using 10 modules can form the smallest cylindrical diameter of 1019mm.



最小弯曲直径
Minimum bending diameter

- Schematic diagram of module bending radius: The inner and outer arcs can be bent by $\geq 162^\circ$.



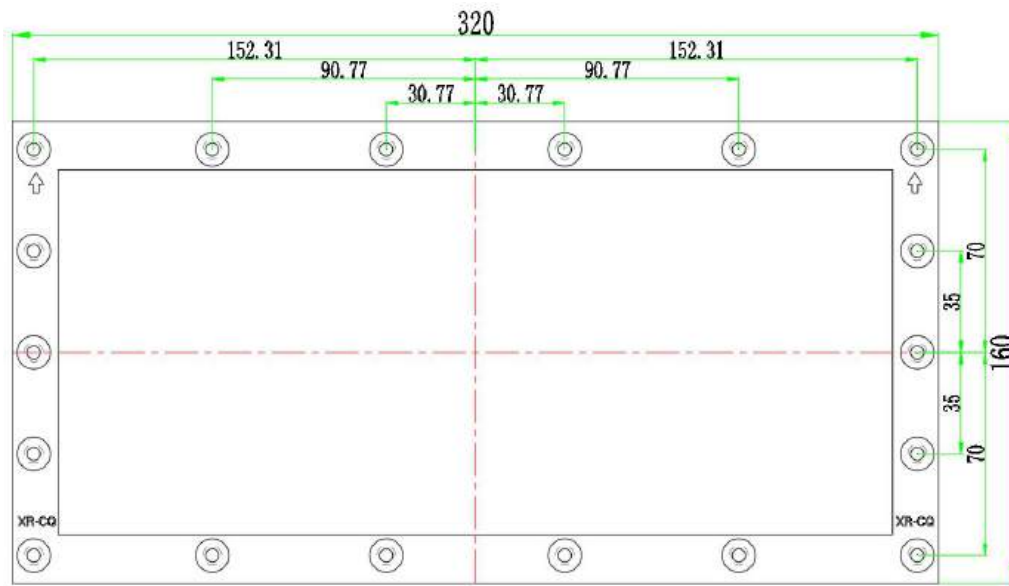
最小弯曲直径
Minimum bending diameter



5.Product Parameters

Product Name		TBC-P1.25
Technical Parameters	Pixel configuration	1R1G1B
	LED packaging specification	SMD1010
	Pixel density (dots/sqm)	640,000
	Module size (mm)	320X160X8.6 (length X height X thickness)
	Module resolution	256X128
	Scanning method	48 scans
	Standard constant current IC	PWM
	Refresh frequency (Hz)	3840hz
	Frame change frequency (Hz)	60hz
	Gray scale level (bit)	13-14bit
	Assembly diameter	1019mm
	Bending radius	≥162°
	Signal interface method	HUB75(no cascade interface)
	Module bottom case material	Silicone soft bottom case
	Module weight (g/piece)	210g
	Flatness (mm)	≤ 0.3 mm
	Module protection level	No protection
	Installation/maintenance method	Front or rear installation/maintenance
Optical Parameters:	Brightness (cd)	650cd
	Color temperature (K)	10000-12000 K adjustable
	Coordinates	X:0.2500 Y:0.3000 ± 0.01
	Horizontal/vertical viewing angle	X:150° / Y:120°
	Contrast ratio	≥6000:1
Electrical Parameters	Module supply voltage DC (V)	5V
	Maximum module current DC (A)	3.2A
	Maximum module power consumption (w/piece)	16w
	Working input voltage AC (V)	220 V
	Peak power consumption (w/sqm)	440 w
	Average power consumption (w/sqm)	125 w
Usage Parameters	Typical service life (h)	100 000 h
	Operating temperature range (°C)	-20—40°C
	Operating humidity range (RH)	20%—75%RH

6.Module hole position diagram



7.Installation

7.1 Installation schematic diagram

Cylindrical structure installation

01 圆柱结构安装



Soft module

Cabinets

Install the soft module into the cabinets

Finished product

7.2 Precautions for Installation Details

- Operators must wear anti-static gloves when assembling modules.
- Do not splash water on the screen body or modules. When cleaning dust, do not use rags, objects with moisture or hard objects for cleaning. Anti-static soft brushes can be used for cleaning.
- The relative humidity of the working environment should be within the range of 20% to 75%. Before assembling the modules, place them in a dry place to ensure that the modules are stored in an environment with a temperature not higher than 30°C and a humidity not higher than 65%.
- Do not tear or pull violently. When plugging and unplugging wires, do it gently to avoid breaking copper pillars and damaging PCBs due to excessive force.
- Do not use galvanized square tubes for installation. Galvanized square tubes cannot ensure flatness. It is recommended to install with an iron cabinet spraying process.
- For simple arc-shaped and cylindrical sheet metal iron cabinets, the spraying process is recommended. It is easy to install and has good flatness.
- The bending angle of the module is between 162° to 180°. Do not bend the module violently and repeatedly.

*Product failures or damages caused by failure to comply with the precautions in the installation details manual or due to human factors are not within the warranty scope of the manufacturer.

Please properly keep the accompanying materials and screen accessories. If you have any questions, please contact our company.



Prohibit violent bending



Prohibit violent bending



Prohibit violent pulling on galvanized square tubes

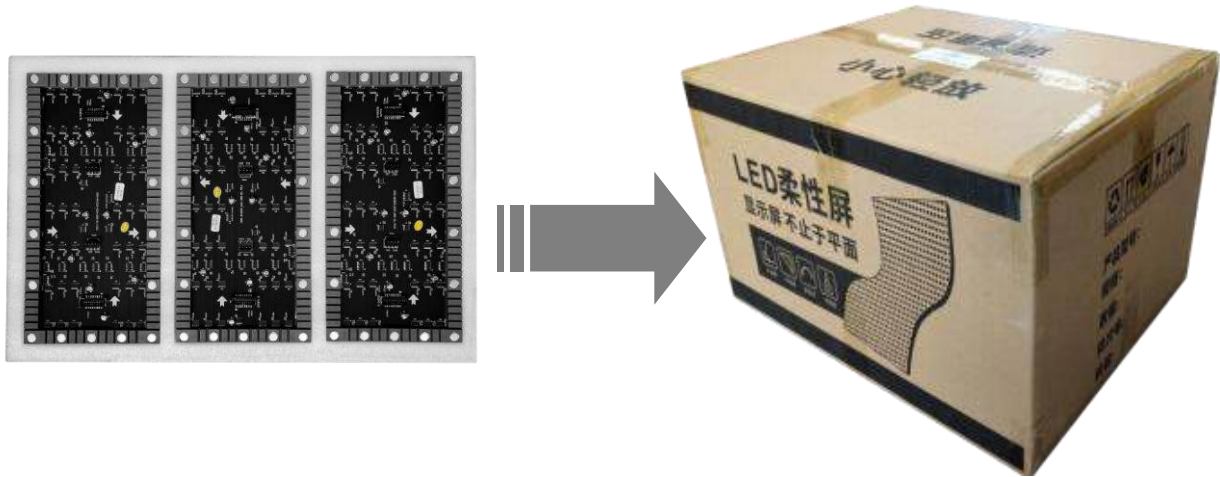


8.Accessories of module cabinet

Item		Item Specification model (for reference only)	Picture
Power supply	Power supply Input voltage	AC 110/220V	
	Working frequency	50HZ/60HZ	
	Output voltage	DC 5V	
	Output power	200W	
Control system	Transmitter card	(Linsn - or Nova - Colorlight - etc.)	
	Receiver card	(Linsn - or Nova - Colorlight - etc.)	
Processor	2-in-1 video processor	(Linsn - or Nova - Colorlight - etc.)	
Cabinet	Sheet metal cabinet	(Cylindrical cabinet - Curved cabinet - cabinet cabinet).	

9. Packaging method

Module size(mm)	Outer box size (mm)	Number of modules(PCS)	Weight of the whole box(KG)
320X160	570X370X385	54	22.4



10. Flexible application scenarios

