

Outdoor LED Display Waterproof and Dustproof Grades

IP65 is a hot word when we talking about outdoor LED display. IP65 is a standard for outdoor display, it means products can completely prevent dust into and can be rinsed with water without any damage.

IP (International Protection) grade standard is draught out by IEC (International Electro-Technical Commission), aimed to point out appliances equipment's waterproof and dustproof grade. The first marker number refers for dustproof grade, the second one refers for waterproof grade.



IP 65

Grades Form

Waterproof and Dustproof Grades		
Marker Number	Waterproof Grades	Dustproof Grades
0	Unprotected	Unprotected
1	Prevent more than 50mm solid outside objects invasion	Prevent water-drop invasion
2	Prevent more than 12.5mm solid outside objects invasion	Still prevent water-drop invasion when tilt 15 degrees
3	Prevent more than 2.5mm solid outside objects invasion	Prevent spraying water invasion
4	Prevent more than 1.00mm solid outside objects invasion	Prevent splashing water invasion
5	Prevent outside objects and dust	Prevent jetting water invasion
6	Prevent outside objects and dust	Prevent surges invading



How does our outdoor LED display achieve at IP65 ?



There are **four main steps** to make the outdoor LED display be waterproof and dustproof.

I .LED PCB board waterproof Filling. All LED PCB boards be applied by thick moisture-proof paint.

II .Module waterproof and dustproof Filling.Modules all be filled with melted rubber to front side, and apply waterproof rubber ring to backside.

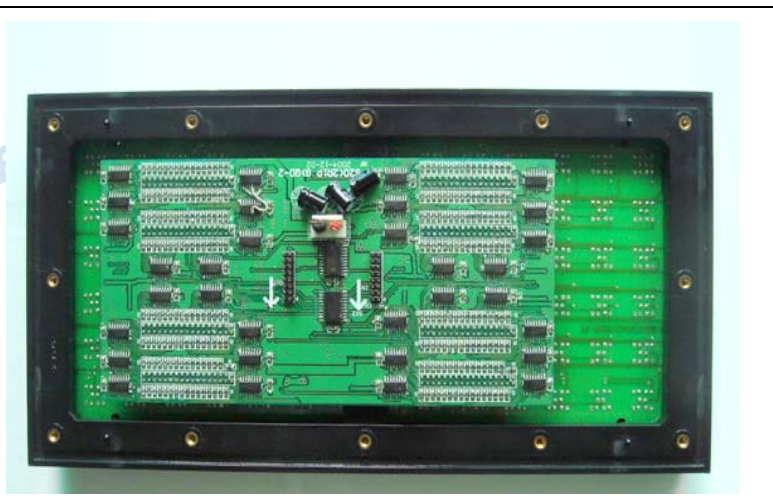
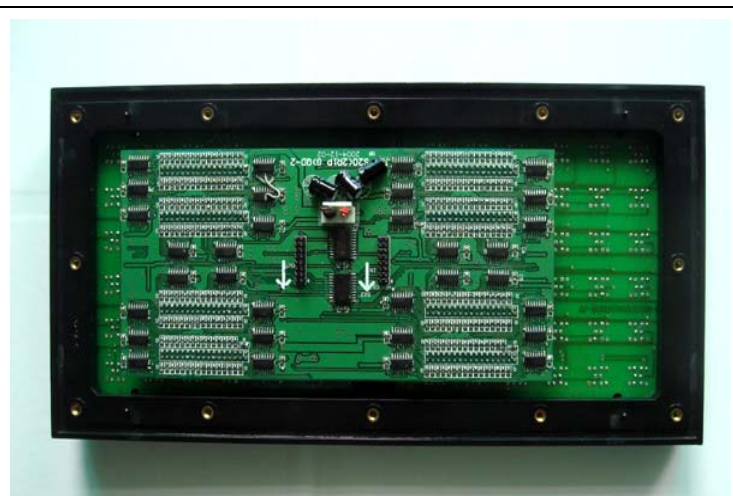
III.Combined the waterproof and dustproof modules to the thick cabinet.All cabinets are thick iron or aluminous cabinets, cabinets all have a filter for dustproof .

IV.All connectors are waterproof. The data connector and power connector for connecting cabinets are all waterproof.

After above 4 steps , a waterproof testing will be taken, to make sure the displays achieve at IP65.

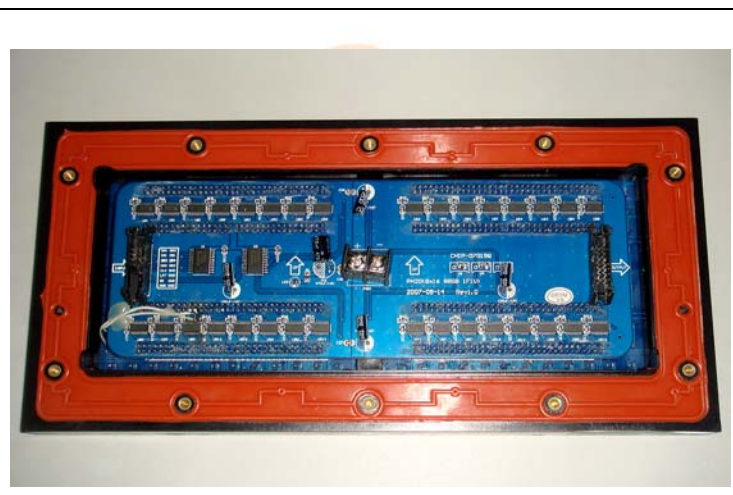


Illustration for the 4 steps



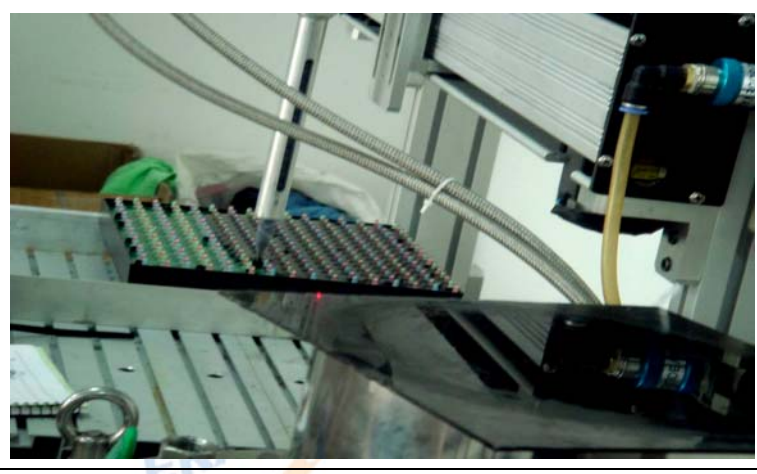
PCB with thick moisture-proof paint

PCB without thick moisture-proof paint

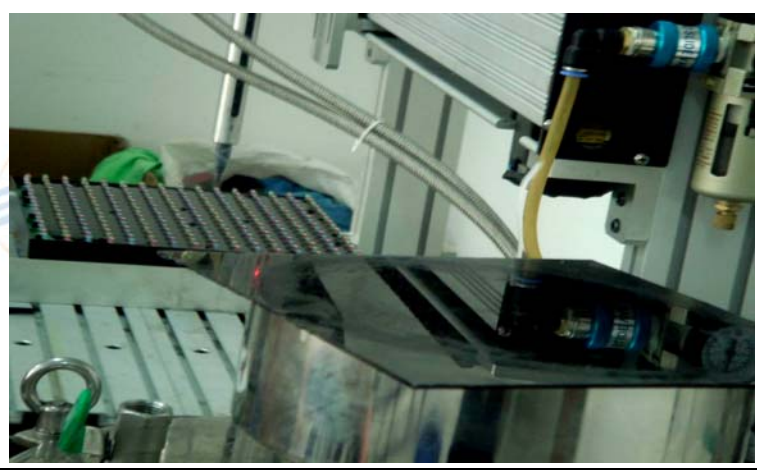


Module with waterproof rubber ring

Module without waterproof rubber ring



Module is been rubbering



Module after rubbering

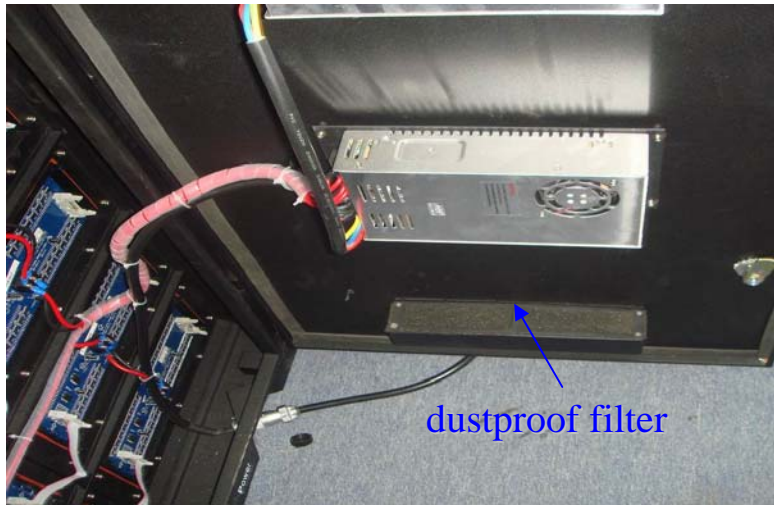


Waterproof cabinet with backdoor



Simple cabinet without backdoor





Cabinet with dustproof filter



Waterproof connector

