

Storage Instructions for StarPower Module

It is necessary to minimize damage to the modules due to external factors during transport and storage process. In general, the datasheet will indicate the limit value for the modules storage, but try not to store the modules in the limit environment.

The storage life of modules which we recommend is as follows. If the storage life exceeds years, the dynamic and static performance of the module, the oxidation of the terminals, the welding of the terminals, the deformation of the housing and the baseplate should be inspected and evaluated. In addition, it is necessary to consider the storage environment, stacking height restrictions, electrostatic protection and other requirements for the protection of modules in the process of cleaning, packaging, transfer, storage.

Package Type	Storage measures	Atmospheric Environment	Environmental Conditions Temperature/Relative Humidity	Maximum storage time
Modules with solder terminals	Original package	Air	5-40°C/10%-75%	24 months
Modules with TIM materials	Original package	Air	5-40°C/10%-75%	24 months
Modules with Pressfit pin	Original package	Air	5-40°C/10%-75%	60 months
Modules with screws	Original package	Air	5-40°C/10%-75%	60 months

1 Storage Environment

1.1 The temperature and humidity control standards for products: temperature requirements: 5°C~40°C, relative humidity requirement: 10%~75%. It is recommended to equip the thermometer and hygrometer in warehouse to detect the temperature and humidity values. It is necessary to specially pay attention to the temperature and humidity changes in continuous rainy and snowy weather. And we can adopt regulating equipment of temperature and humidity to control the changes.

1.2 It is necessary to ensure that the storage area does not contain corrosive gases such as acid gases, organic solvents, and gases containing a large amount of dust to avoid oxidation of terminals and baseplates and contamination of the housing.

1.3 It is critical to avoid exposing products to harmful electric field strengths.

1.4 It is necessary to avoid direct exposure to solar radiation.

1.5 It is key to pay attention to ensure that the external forces or load are not applied to the terminals, housing, base plate. It is necessary to stack modules neatly to avoid disorderly stacking resulting

squeezing for modules in the box. In addition, auxiliary items which are not related to the product should not be placed on the package to exert gravity.

2 Stacking recommendations

2.1 The products for blister box package: stacking height restriction for L series modules ≤ 10 boxes height, F series modules ≤ 8 boxes height.

2.2 The products for carton package: stacking height restriction for P series modules ≤ 8 boxes height. Non P series modules ≤ 10 boxes height.

3 Electrostatic protection

3.1 Do not touch the control terminal pins with bare hands.

3.2 The operators must wear specific anti-static clothing, anti-static gloves and wrist guards to perform cleaning, packaging and other operations.

3.3 It is important to ensure that the operating workbench is grounded and the effectiveness of the grounding is checked regularly.

3.4 The anti-static packaging must be complete before storing modules. The signal terminals have anti-static protection (specific anti-static sponge), and the housing, baseplate, terminals must be cleaned.

3.5 It is important to take and put the module as lightly as possible to avoid dropping, touching, bumping and other phenomena to protect the chips, internal aluminum wire and other parts of the module.

3.6 For temporary placement of modules, it is necessary to choose packaging containers which are not prone to generate static electricity and ensure that the placement location is dry and clean.