



Packaging, Transportation and Storage Instruction for Yingli Solar Modules

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This Information is for Yingli Solar PV module Package, Transport and Storage instructions. To ensure the safety of loading, unloading, unpacking and storage of PV Modules, please read this information carefully.

When you need to unpack and install the modules, you can search and download relevant content from Yingli's official website.(www.yinglisolar.com)

2 Products involved



The instruction involves the following products sold by Yingli Solar.

Wafer size	YLM 3.0 Series	PANDA 3.0 Series
	PERC glass-glass module	TOPCon glass-glass module
210*210mm	—	YLxxxCF66 f/2

2 Products involved



Basic information:

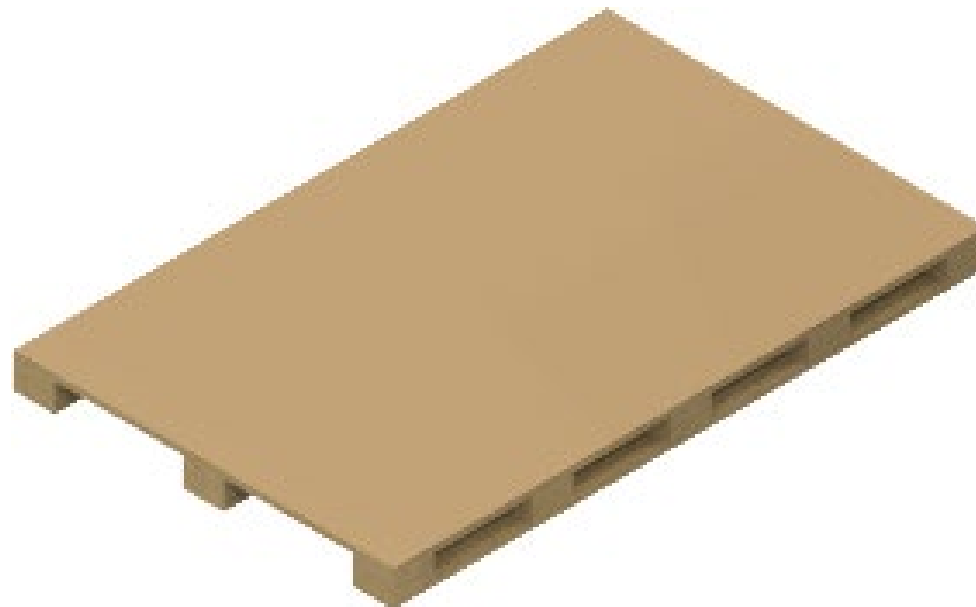
No.	Module type	Module				Package					40ft container		
		Dimension of module			Weight	Dimension of package			Module QTY per pallet	Weight	Pallet QTY per container	Total module QTY	Container type
		L	W	H		L	W	H					
		[mm]	[mm]	[mm]		[mm]	[mm]	[mm]		[kg]	[pallet]		
1	YLxxxCF66 f/2	2384	1303	33	37.3±3%	1340	1140	2500	33	1284±3%	17	561	HQ

Yingli Solar reserves the right to make changes to the package specification without prior notice.

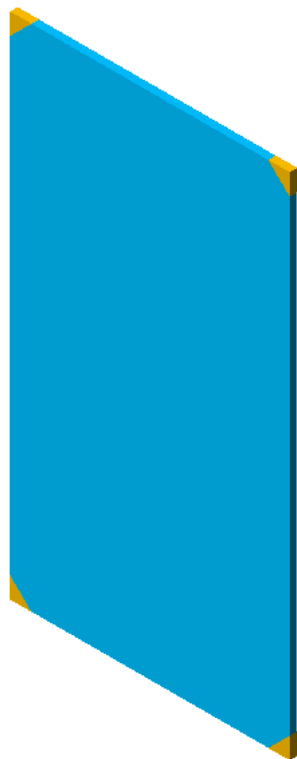
3.1 Place the pallet on a flat surface.



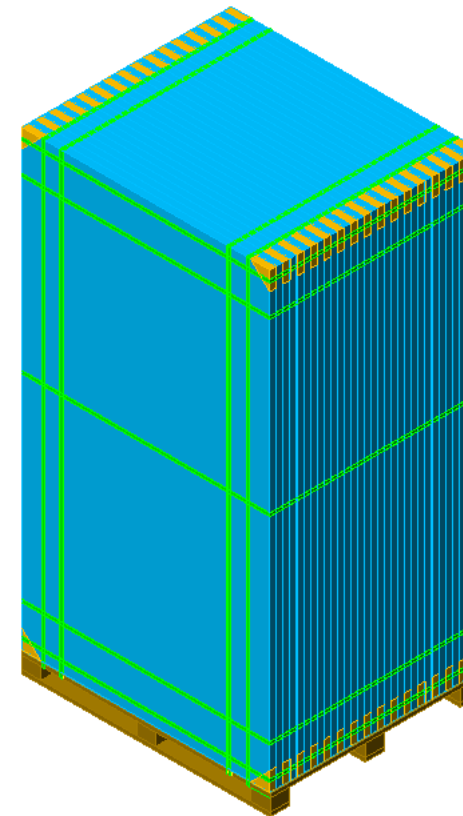
3.2 Pallet lined with cushioning plates.



3.3 Put the paper corner protectors for modules..



3.4 Place the modules vertically on the pallet and fasten them with strapping.

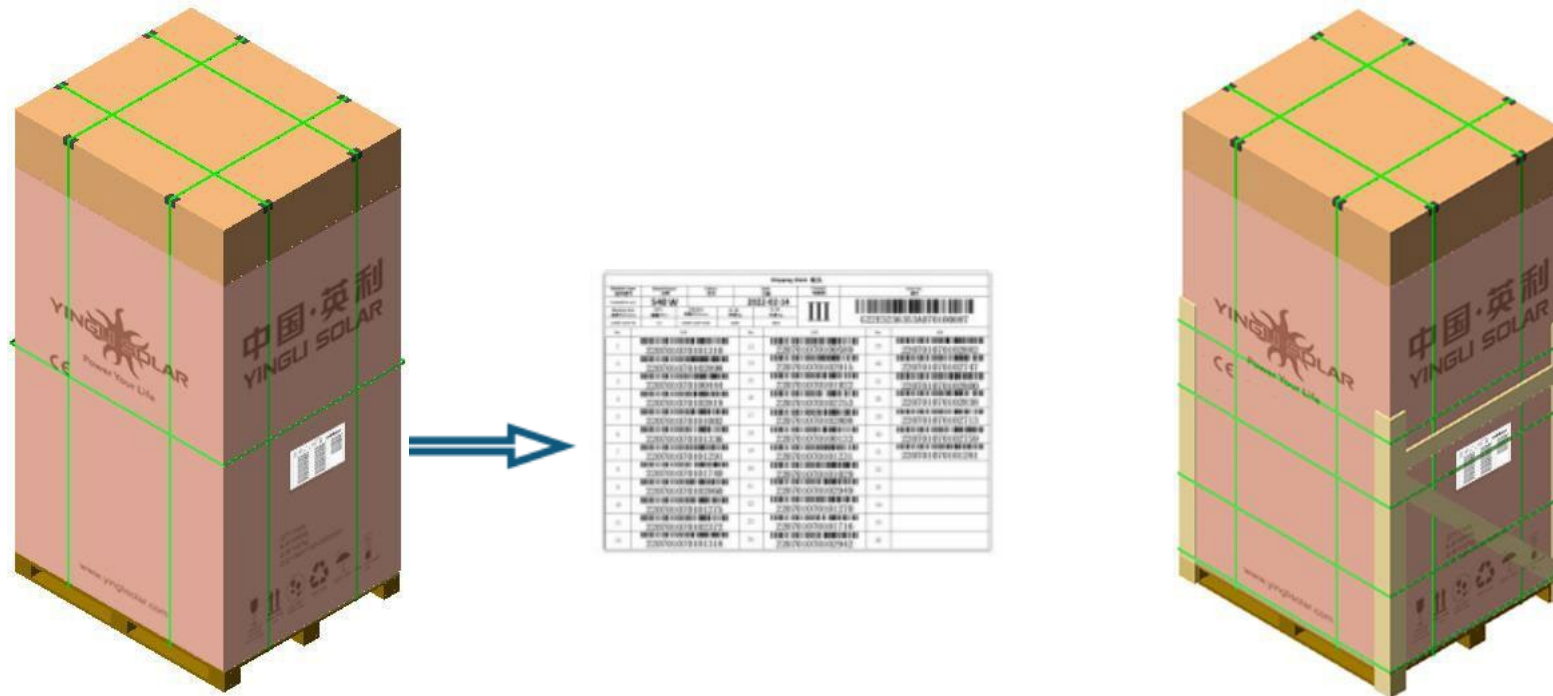


This packaging method is valid for:

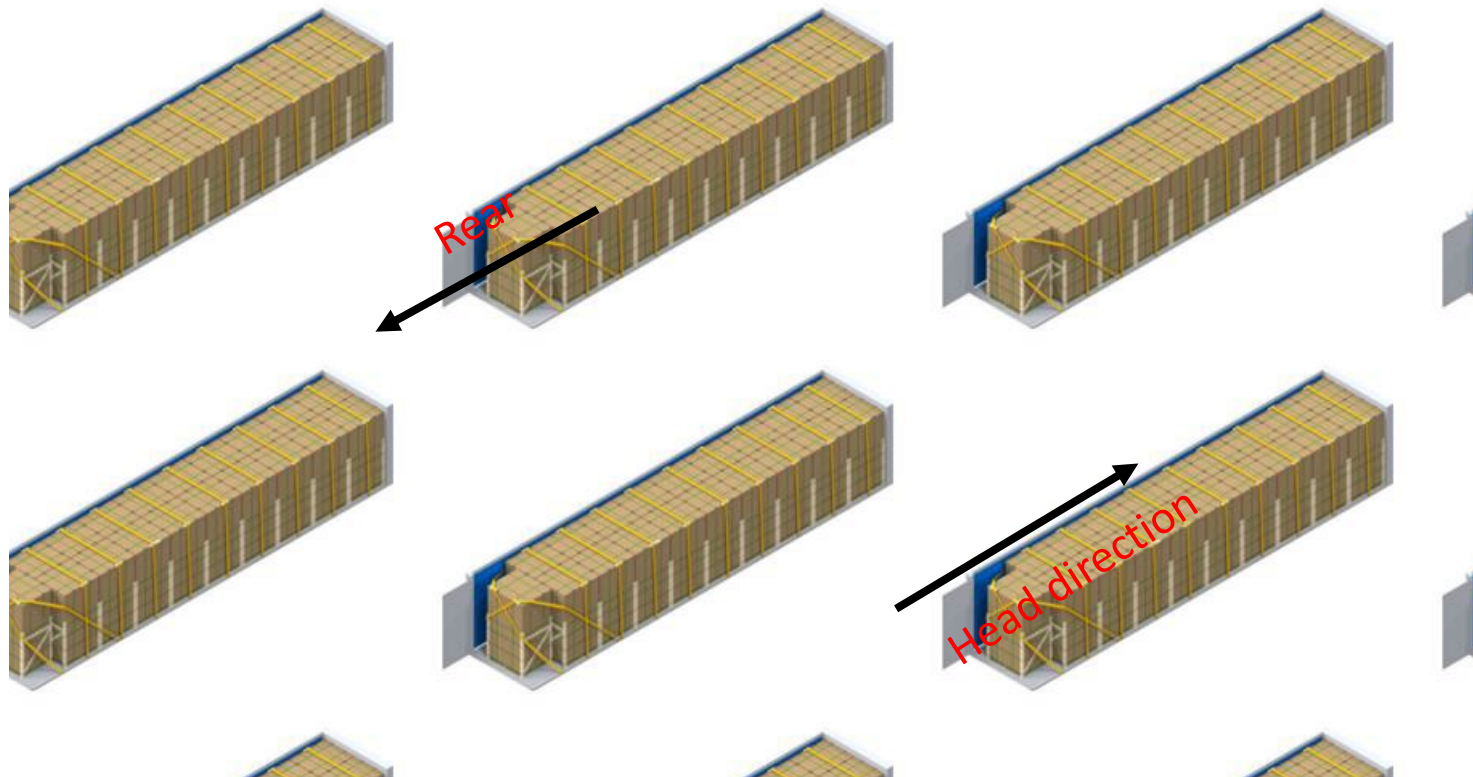
- PANDA G12 (132 HC CELLS)

3.5 Place the cardboard box over the modules and fold over the swing cover, strap to secure box and pallet assembly and put the marker.

3.6 Re-reinforcement of the box and pallet assembly with wooden fluting and strapping.



Module containers are placed side by side when loading; If the number of containers is single (stacked), it should be placed at the end of the container when it needs to be placed horizontally.



In the process of loading, the overall balance of the module pallets should be maintained, and the handling should be light. In the loading process to prevent the fork collision module pallets and packaging boxes; It is strictly prohibited to push or pull modules directly or indirectly on the bottom plate of the transportation vehicle; The modules in the container need to ensure that there is no gap between the pallets. Once the modules are loading completed, they are secured at the rear of the car using at least one of the following three ways:

1.Binding fixed: Use container bindings to cross-tie the tail pallet module (bindings are tied to the hook in front of the last pallet module or flush with the;



2.Block fixed: Use nails to fix the wooden protecting arris to the bottom plate;



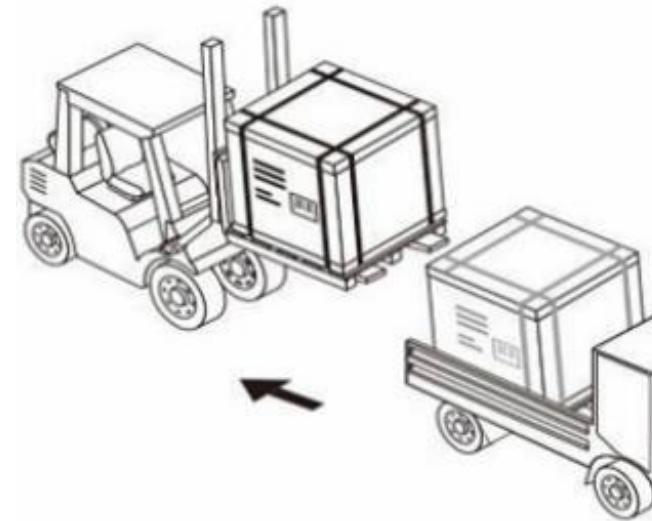
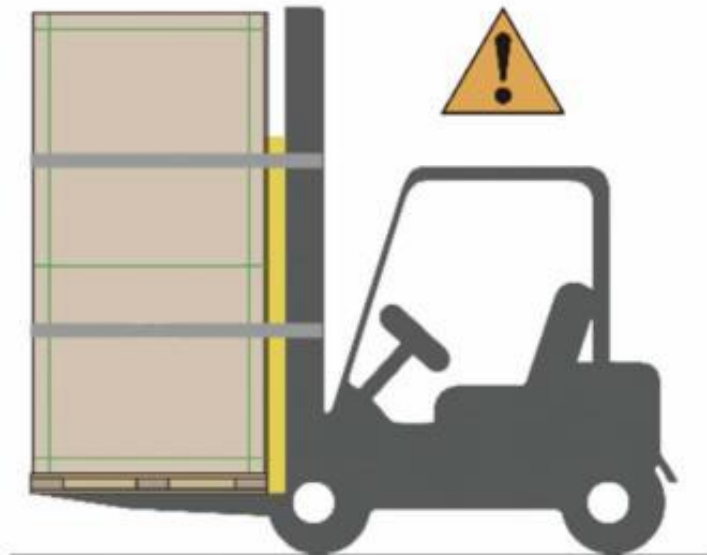
3.Air bag fixed: Fill air bags are placed at the tail ;



Container unloading mode

Forklift is preferred, and crane can be used when conditions are not allowed; Do not use other vehicles such as loaders to unload vehicles; When unloading, the whole modules should be balanced as far as possible, the forklift arm should be kept relatively horizontal, and the forklift truck should fork the modules out of the container slowly and smoothly;

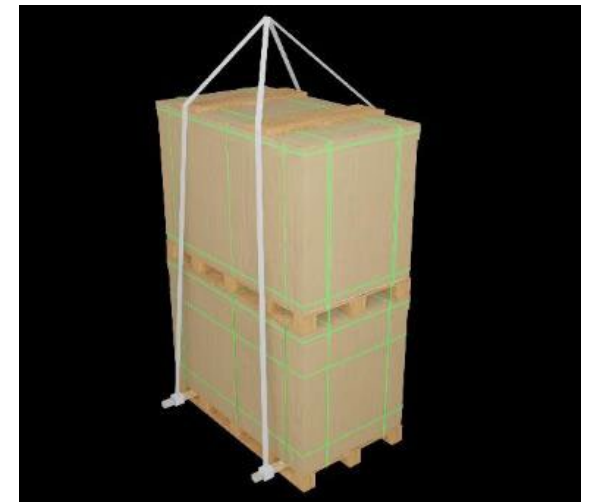
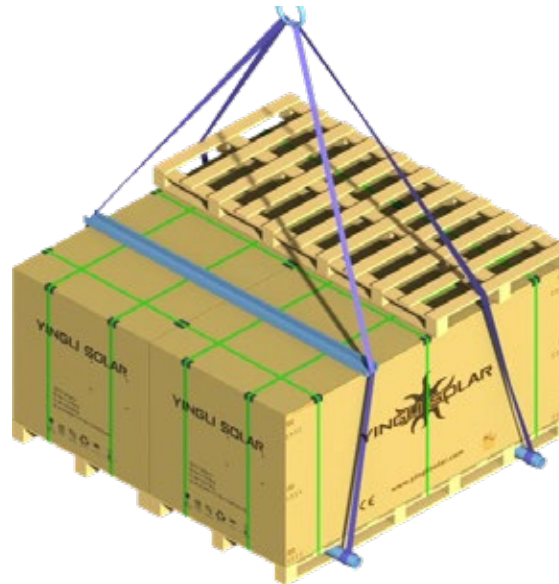
When the forklift is unloaded, please select a forklift with sufficient lifting weight, and the depth of the fork teeth inserted into the pallet is not less than three quarters of the pallet; The vertical packaging modules use a wide rope to secure the modules to the forklift, and then the modules is unloaded from the truck. Since the packing box will block the sight of the forklift truck driver, the forklift should be reversed during the process of transport, and personnel should be arranged to supervise and command to prevent collision accidents.



If a crane is used for unloading, the module should be lifted by using a rope of flexible materials such as cloth suspenders, and the channel steel or steel pipe (according to the lifting weight to select the corresponding specification) through the wooden pallet at the bottom of the module package. The use of steel wire rope is strictly prohibited.

The number of single lifting shall not exceed 2 boxes, and the packing boxes of modules shall be balanced during operation. When the two lateral boxes are lifted at the same time, pallets or channel steel should be placed on the top of the module to support the lifting rope, Prevent the modules from squeezing each other, resulting in profile deformation and glass breakage.

After unloading, the modules should be placed on the level ground, and no inclined storage should be allowed. If the modules are stored at the project site for more than 15 days, it is recommended to place them in a single layer to prevent the dumping of the modules after a long time.



- ◆ Do NOT remove the original packaging if the modules require long-distance transport;
- ◆ When the modules are transported at the project site, the transportation route shall be selected on a smooth road to avoid damage or cracks of the modules caused by turbulence ,collision, extrusion, tilt and other factors. The modules shall be transported on a flat ground;
- ◆ During the transport, make sure that the package is fixed with packing straps securely to the shipping platform without movement, When the transportation road has many factors such as slope and curvature, large, slippery road surface, potholes and inequality, it should slow down to maintain the stability of the transportation process, and strictly prevent sudden changes and stops.
- ◆ If there are road conditions that are easy to cause module damage (such as sand or potholes, transport up the hill, etc.),The modules should be placed in a single layer on the transport vehicle, no stacking is allowed, and the modules should be fixed on the transport platform with ropes.
- ◆ Modules should be covered with rain-proof tarpaulin during transportation, do a good job in moisture-proof, rain-proof, snow-proof and other protective work;
- ◆ More detail requirements please reference to the “Yingli Specification for packaging and transportation of modules”

Storage Information



Do NOT remove the original packaging if the module require long-term storage;

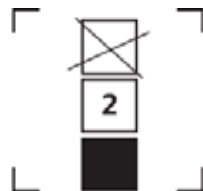
Do NOT expose the modules to rain or moisture. Store the finished product in a well ventilated, waterproof, dry and smooth place (moisture 85%, temperature range from -20°C to +50°C)

Do NOT Stack more than 2 layers, should placed neatly with a safe distance between the boxes;

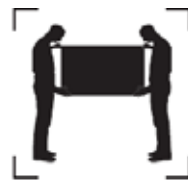
The module must be installed as soon as possible in the project site and must not be exposed to rain or damp or direct sunlight and protected with waterproof(rain) measures. Yingli shall not be responsible for any damage or collapse of the modules caused by moisture in the packaging.



KEEP DRY



STACK LIMIT IN 2 UNITS



**MODULE SHOULD BE
HANDLED BY 2 PERSONS**



THIS SIDE UP



FRAGILE



DO NOT STEP ON





THANKS

英利能源发展有限公司
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