

CSUN Crystalline Silicon PV Module Products Installation Manual

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Crystalline Silicon PV Module Products

Installation Manual

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1 General Information

This manual contains information regarding the installation and safe handling of the photovoltaic module (hereafter is referred to as “module”) which are produced by China Sunergy Co., Ltd., or its subsidiaries (hereinafter is referred to as “CSUN”).

Installers must read and understand the manual before installation. Any questions, please contact the sales or customer service personnel of CSUN for further explanations. The installer should conform to all safety precautions in the manual and local laws & regulations when installing module; before installing a solar photovoltaic system, installers should become familiar with the mechanical and electrical requirement for such a system. CSUN has the right to refuse to compensate for the product damage due to construction or design defects of the solar photovoltaic system.

Keep this manual in a safe place for future reference (care and maintenance) and in case of sale or disposal of the modules.

2 Disclaimer of Liability

Customers shall strictly abide by the requirements of this manual when installing the modules of CSUN. If the conditions or methods of the installation, handling, use and maintenance of the customer are beyond the range specified in this manual and cause damage, CSUN does not assume responsibility for any loss, damage or expense thus caused.

No responsibility is assumed by CSUN for any infringement of patent right or other rights of third parties, which may result from the customer’s use of the CSUN’s modules. No patent license or patent rights is granted to customer, express or implied, due to its use of CSUN’s modules.

The information in this manual is based on CSUN’s best knowledge and experience and is believed to be reliable; but such information including product specification (without limitations) and suggestions do not specifications, or product information without prior notice.

Notification is needed while the the modules are reinstalling.

3 Safety Precaution

3.1 General Safety

- ✚ When installing the modules, it should be abided by the relevant local laws and regulations. It is need to obtain the required certificates in advance when necessary, such as the building permit.
- ✚ Installing solar photovoltaic systems require specialized skills and knowledge. Installation should be performed only by qualified persons. Installers should assume the risk of all injuries that might occur during installation, such as electric shock.
- ✚ Photovoltaic modules are designed for outdoor use. Modules may be mounted on ground, rooftops, vehicles or boats. Proper design of support structures is the responsibility of the system designers or installers. Mounting holes or clamp range and numbers suggested in this manual shall be used.
- ✚ A single module may produce the direct current (hereafter is referred to as DC) voltage of above 30V in direct sunlight and it is extremely dangerous to contact it.. Do not touch or lean on an operating module.
- ✚ Do not disconnect under load or apply paint or adhesive to module surface.
- ✚ Keep all electrical contacts clean and dry. Do not change the wiring of the bypass diodes. Do not disassemble the modules or remove any attached nameplates or components from the modules.
- ✚ Do not use mirrors or other magnifiers to artificially concentrate sunlight on the modules. Do not expose the backside of modules directly to sunlight for a long time.
- ✚ Modules should store in a dry and ventilated environment. In the storage and handling process,in case of inclement weather (rain, snow, wind, etc.) , materials such as plastic film and waterproof cloth need to be covered on the packing boxes.
- ✚ During normal work, materials such as plastic film and waterproof cloth are forbidden to be covered on the glass surfaces of modules.
- ✚ Unpack the modules with packing box when they are moving on the ground. Unpacking directly when the modules are superposed is forbidden.

3.2 Handling Safety

- ✚ Keep children and unauthorized persons away from the modules while transporting and installing them. Improper transportation and placing may lead to glass breakage or power loss of the modules, resulting in the loss of the use value of modules.
- ✚ Handle modules with care. Lift and put down modules gently. Do not drop modules or drop objects on the modules. Pay special attention not to collide, scratch or press the module backside when transporting and installing the modules. The double glass module should be handled more carefully. Non-slip gloves are required when handling and during installation.
- ✚ It is forbidden to pull the junction box or cables when carry or lift the modules. Carry a module by its edges with two or more persons. Increasing one or two persons lift up the middle of the panel is necessary for Non-frame module.
- ✚ Do not stack the modules for transportation. Do not set the modules down on any hard surface, which maybe cause the cells broken.
- ✚ To avoid module damage, do not place heavy objects or tools on the modules, and do not stand or step on the modules.
- ✚ Inappropriate transport and installation may damage the module. Control the vehicle speed when the road condition is relatively poor.

3.3 Installation Safety

- ✚ Abide by the safety regulations for all other components used in the system, including wiring and cables, connectors, solar charge controller, inverters, storage batteries, etc. Use suitable equipment, connectors, wiring and mounting system for a PV system. Use the same type modules and ensure color grade consistent as far as possible in one system.
- ✚ Do not install or handle the modules when they are wet or during strong wind.
- ✚ Modules are constructed with tempered glass, which shall be handled with care. Improper operations may cause the tempered glass breakage. If the front glass is broken or if the backsheet is burned-out, contact with any module surface or the aluminum frame can produce electrical shock, particularly when the module is wet. Broken or damaged modules must be disposed properly.