



The Standing Seam Metal Roof that Generates Clean, Renewable Electric Energy

ATA-SOLAR™

Major System Components by Electrical Contractor

3 kW System

Equipment Manufacturer	Description	Model
SMA	AC-DC Disconnect	AC-DC Disconnect
SMA	3 kW Inverter	SB 3000US
Square D	3-Pole Non-Fused Disconnect	HU361NRB
Square D	Roof Mount DC Disconnect	HU361RB
Multi-Contact	2/RHW-2MC	Quick Connects

5 kW System

Equipment Manufacturer	Description	Model
SMA	AC-DC Disconnect	AC-DC Disconnect
SMA	5 kW Inverter	SB 5000US
Square D	3-Pole Non-Fused Disconnect	HU361NRB
Square D	Roof Mount DC Disconnect	HU361RB
Multi-Contact	2/RHW-2MC	Quick Connects

10 kW System

Equipment Manufacturer	Description	Model
SMA	AC-DC Disconnect	AC-DC Disconnect
SMA	(2) 5 kW Inverter	SB 5000US
Square D	3-Pole Non-Fused Disconnect	HU362NRB
Square D	Roof Mount DC Disconnect	HU361RB
Multi-Contact	2/RHW-2MC	Quick Connects

15 kW System

Equipment Manufacturer	Description	Model
SMA	AC-DC Disconnect	AC-DC Disconnect
SMA	(2) 5 kW Inverter	SB 7000US
Square D	3-Pole Non-Fused Disconnect	HU363NRB
Square D	Roof Mount DC Disconnect	HU361RB
Multi-Contact	2/RHW-2MC	Quick Connects
SMA	(2) Combiner Box	SBCB-6



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30 kW System

Equipment Manufacturer	Description	Model
SMA	AC-DC Disconnect	AC-DC Disconnect
SMA	(4) 7 kW Inverter	SB 7000US
Square D	3-Pole Non-Fused Disconnect	HU364NRB
Square D	Roof Mount DC Disconnect	HU361RB
Multi-Contact	2/RHW-2MC	Quick Connects
SMA	(4) Combiner Box	SBCB-6

60 kW System

Equipment Manufacturer	Description	Model
SMA	AC-DC Disconnect	AC-DC Disconnect
SMA	(8) 7 kW Inverter	SB 7000US
Square D	3-Pole Non-Fused Disconnect	HU364NRB
Square D	Roof Mount DC Disconnect	HU361RB
Multi-Contact	2/RHW-2MC	Quick Connects
SMA	(8) Combiner Box	SBCB-6

120 kW System

Equipment Manufacturer	Description	Model
SMA	AC-DC Disconnect	AC-DC Disconnect
SMA	(3) 42 kW Inverter	ST42
Square D	3-Pole Non-Fused Disconnect	HU366NRB
Square D	Roof Mount DC Disconnect	HU361RB
Multi-Contact	2/RHW-2MC	Quick Connects
SMA	(2) Combiner Box	SBCB-52

For complete listing of components, wiring info and fuses etc, with electrical specifications and drawings for ATA-Solar installations are available through ATAS International, Inc.

The Major component and their functions are:

PV Laminates: Produces DC electricity.

Array DC Combiner box: combines wires from each array of laminates into one wire.

Array DC Disconnect switch, is a safety on/off switch and is generally combined into the Inverter. The Inverter converts DC (Direct Current) electricity to the AC (Alternating Current). The Isolation Transformer adjusts the AC electricity to the correct voltage. These 3 components are all combined into a SMA Sunny Boy Inverter.

AC Circuit Breaker is an on/off switch for the protection of the utility system in the building.

Typical example of related components required for system sizes noted above. Other sizes are available and related components determined accordingly.