



PV Array Power STC (W)	PV Array Power PTC (W)	PV Array Voc	SMA Inverter Model	Invrter Max Current
6110W	5524W	478V	SB6000US	25A

Notes:

1. PV Array contains two parallel strings of 13, 235-Watt modules in series (26 modules total). cUL 1703.
2. PV Array wiring to combiner is #10 AWG USE-2 2000v 90°c with MC4 male/female locking connectors.
3. PV array combiner box fused 15 Amps/string, transition from PV wire to overhead line.
- 4.SMA PV Power source disconnect, 15 Amps / string, 600-Vdc, NEMA 3R enclosure.
5. DC/AC Inverter is a SB6000US model rated at 6KW AC output and will be configured for 240 volts, 60Hz. Ground fault protection provided in DC/AC Inverter. Inverter is listed to UL-1741, "Utility Interactive"
6. AC disconnect (Fused), rated 30 amps, 600Vac NEMA 3R rainproof enclosure.
7. Rooftop equipment ground is a #8 AWG bare CU, connection to rails and panels w/ tin plated copper lugs. Remainder of grounding uses #6 AWG, Utility disconnect ground is bonded to neutral in house panel.
8. Negative pole of PV array referenced to ground at the inverter.
9. AC Lightning Arrestor is a Delta model LA303-R 240V.
10. DC Surge Arrestors located at rooftop combiner and inverter, Delta LA602 DC 600V.
11. Conductors are copper unless otherwise noted.

Amped Solar Designs

Title: One-line Electrical Diagram

MicroFIT Name: Barn Roof

Drawn By: J.Bernardon

Date: June 2, 2011

Scale: NTS

Rev: D