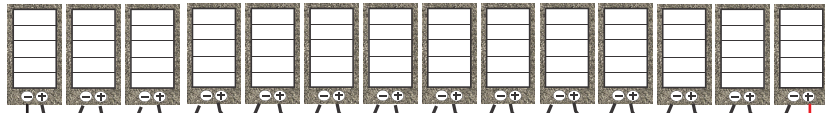


SCHOTT Poly 225 14 Modules  
1 string of 14 in series



3/4" EMT Conduit with two #8 AWG, THWN conductors, a #8 AWG, THWN equipment grounding conductor and a #8 AWG, THWN DC circuit grounding conductor (for all conduit from Inverter to Main Service Panel)

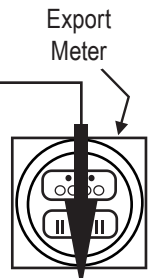
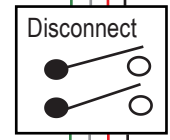
3/4" EMT Conduit with two #12 AWG, THWN conductors and a #12 AWG, THWN equipment grounding conductor (for all conduit from rooftop combiner to PV Power Source Disconnect)

12 GA THHN

8 GA THHN

8 GA THHN

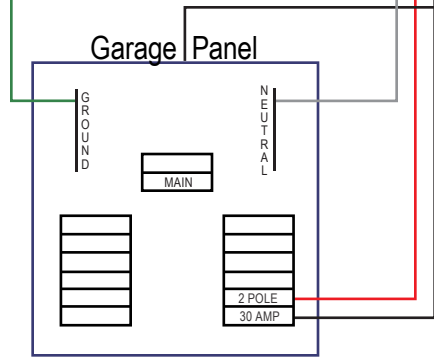
SB4000US  
DC/AC Inverter  
(notes 4, 5, 6)



Company owned service

Outdoor  
Indoor

Garage Panel



- Notes:
1. PV Array contains one parallel strings of 14, 225 Watt Modules in series (14-modules)
  2. PV Array wiring to combiner is #10 AWG THHN with factory-installed MC connectors to interface with modules
  3. PV Power Source Disconnect
  4. Ground-Fault Protection provided in DC/AC Inverter
  5. DC/AC Inverter is SB4000US model rated at 4 kW AC output and is rated to provide 29 amps at 240 Volts at 40°C
  6. Inverter is Listed to UL-1741 "Utility-Interactive"
  7. Utility Switch is visible open, lockable in open position, 240-Vac, 40-amp switch
  8. 100 Amp Main Service Panel with 30 amp Two-Pole Circuit Breaker for Interactive Point of Connection (up to 30 amp allowed for 100 amp busbar—NEC 690.64(B)(2) exception)
  9. Equipment grounding conductors on AC- and DC-side sized according to NEC 250.122
  10. Negative pole of PV array referenced to ground at the Inverter
  11. All grounds connected to main service ground in Main Service Panel
  12. General Notes - this design is not intended to be a complete design and is only for reference. All installations should meet national and local codes. Contact local licensed professionals to ensure installation meets all applicable codes.

|                        |     |
|------------------------|-----|
| Operating Voltage      | 372 |
| Operating Current      | 7.6 |
| Maximum System Voltage | 574 |
| Short Circuit Current  | 18  |

|              |        |                         |  |
|--------------|--------|-------------------------|--|
| Revision #:  | Scale: | Solar System Plan:      | Solar System Design by: Leon Bontrager |
| Date: 8/6/10 | None   | 3.1 KW SCHOTT PV System | Home Energy LLC                        |