



WIRING SCHEDULE
a = 10 AWG THWN (Black, Red) & 6 AWG Bare in Sched 40 Gray Conduit, AC
b = 10 AWG THWN (Black, Red) & 6 AWG Bare in Sched 40 Gray Conduit, AC
c = 10 AWG THWN (Black, White) & 6 AWG Bare in Sched 40 Gray Conduit, DC
d = 10 AWG MC4 PV Wire (Black = POS, Black w/ white stripe = NEG), DC
e = 6 AWG Bare Copper Continuous: 12 PV Panels, Frame, Disconnect to DC Gnd Rod

EQUIPMENT SCHEDULE
#1 = AC - Step Down Transformer (outside)
#2 = AC - Net Billing Meter (outside)
#3 = AC - 200A Main Service Panel (inside)
#4 = AC - Dual 20 Amp Dedicated PV Breaker (inside)
#5 = PV - SQD DU221RB 2-Pole 240V AC Disconnect (outside)
#6 = PV - DC to AC Inverter PVP-3000 Watt (inside)
#7 = PV - Eaton DH16HRK 20A 600VDC Disconnect (outside)
#8 = PV - 12 X 205W Evergreen E-SA-205-fa3 (outside)

12 @ Evergreen ES-A-205-fa3 PV Array
Voltage Open Circuit (Voc) @ 70 Degrees F = 274 V DC
Voltage Open Circuit (Voc) @ 0 Degrees F = 311 V DC
MPPT Power (Pmp) = 2,460 Watts DC (12 x 205w)
MPPT Volts (Vmp) = 218.4 V DC (12 x 18.2v)
MPPT Current (Imp) = 11.27 Amps DC
Short Circuit Current (Isc) = 12 Amps DC

PVP-3000 Watt DC to AC Inverter
Max Input Voltage = 500 Volts DC
Max Input Amps = 26 Amps DC
Max Output Voltage = 264 Volts AC
Min Output Voltage = 211 Volts AC
Max Output Current = 13 Amps AC
Negative Ground / Internal DC GFI
No Neutral, Built-In AC-DC Disconnect

2.5KW PV Array One Line Electrical Diagram