PV ARRAY INFORMATION
# OF MODULES IN SERIES 10
# OF PARALLEL CIRCUITS 2
LOWEST EXPECTED TEMP -10°C
HIGHEST EXPECTED TEMP 43°C

PHOTOVOLTAIC ARRAY
20 MODULES
SHARP ND Q235 F4

1A1
1A10

2A1
2A10

JUNCTION BOX

1

WEGMANN
6 X 6 X 4

DC DISCONNECT
INVERTER

SQUARE D HU361RB
FRONIUS IG 4000

PV METER SOCKET

CIRCLE AW 011-HLP
600 VAC/125A

SQUARE D DU221NRB

AC DISCONNECT

MAIN SERVICE PANEL
100 A
120/240 V

INTERCONNECT WITH 30A DP BREAKER

CONDUCT AND CONDUCTOR SCHEDULE

<table>
<thead>
<tr>
<th>TAG</th>
<th>DESCRIPTION OR CONDUCTOR TYPE</th>
<th>COND.</th>
<th>NUMBER OF</th>
<th>CONDUCT</th>
<th>CONDUCT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>USE-2 0.5 or PV WIRE 0.5</td>
<td>10</td>
<td>1</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2</td>
<td>THHN 2 or THWN-2 or THWN-2</td>
<td>2</td>
<td>2</td>
<td>PVC</td>
<td>1£</td>
</tr>
<tr>
<td>2</td>
<td>INSULATED 150°C</td>
<td>1</td>
<td>1</td>
<td>PVC</td>
<td>1£</td>
</tr>
<tr>
<td>2</td>
<td>DC GROUND NO ELECTRODE COND.</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

PV MODULE RATINGS @ STC

<table>
<thead>
<tr>
<th>MODULE MAKE</th>
<th>SHARP</th>
</tr>
</thead>
<tbody>
<tr>
<td>MODULE MODEL</td>
<td>ND Q235 F4</td>
</tr>
<tr>
<td>MAX POWER-POINT CURRENT (I_{pp})</td>
<td>8.05 A</td>
</tr>
<tr>
<td>MAX POWER-POINT VOLTAGE (V_{pp})</td>
<td>29.2 V</td>
</tr>
<tr>
<td>OPEN-CIRCUIT VOLTAGE (V_{oc})</td>
<td>37.4 V</td>
</tr>
<tr>
<td>SHORT-CIRCUIT CURRENT (I_{SC})</td>
<td>8.59 A</td>
</tr>
<tr>
<td>MAX SERIES FUSE (CPD)</td>
<td>15 A</td>
</tr>
<tr>
<td>MAXIMUM POWER (P_{max})</td>
<td>235 W</td>
</tr>
<tr>
<td>MAX VOLTAGE (TPY 600V_{oc})</td>
<td>600 V</td>
</tr>
<tr>
<td>VOC TEMP COEFF (mV/°C) or %/°C</td>
<td>-0.351</td>
</tr>
</tbody>
</table>

SIGN FOR DC DISCONNECT

PHOTOVOLTAIC POWER SOURCE
RATED MPP CURRENT | 26 A
RATED MPP VOLTAGE | 419 V
MAX SYSTEM VOLTAGE | 600 V
MAX CIRCUIT CURRENT | 30 A
WARNING: ELECTRICAL SHOCK HAZARD-LINE AND LOAD MAY BE ENERGIZED IN OPEN POSITION

SIGN FOR INVERTER OCPD AND AC DISCONNECT

SOLAR PV SYSTEM AC POINT OF CONNECTION
AC OUTPUT CURRENT | 17 A
HIGHEST AC VOLTAGE | 240 V
THIS PANEL FED BY MULTIPLE SOURCES (UTILITY AND SOLAR)

INVERTER RATINGS

INVERTER MAKE | FRONIUS
INVERTER MODEL | IG 4000
MAX DC VOLT RATING | 500 V
MAX POWER @ 40°C | 4000 W
NOMINAL AC VOLTAGE | 240 V
MAX AC CURRENT | 16.7 A
MAX OCP RATING | 30 A

1234 SOLAR PLEXUS WY, DIXON CA 95840
PV System for Single-Family Home

Drawn By: Checked By:
Scale: NTS Date Drawn: 11/20/12

THESOLARPLANNER.COM

Note: This drawing was produced by a PV student for a class.