



Type



Plans

BLD10 - 0794

Permit Number

2074

Street Number

Pleasant Hill Rd

Street Name

TW1

Community Code

076-110 - 012

APN

COUNTY OF SONOMA - PERMIT AND RESOURCE MANAGEMENT DEPARTMENT
2550 Ventura Avenue, Santa Rosa, CA 95403 (707) 565-1900 FAX (707) 565-1103

Please Print
Your Name:

Richard Steele

Date

Applied:

3/8/10

INFORMATION WITHIN HEAVY LINE TO BE COMPLETED BY APPLICANT

SITE LOCATION INFORMATION - PRINT CLEARLY

Site Address:	2074 Pleasant Hill Rd.	City:	Sebastopol	ZIP:	95472
Cross-Street:		APN:	076-110-0150	Project Phone #:	(707) 843-6117
Directions:		Email address:	Matt@dean@gmail.com	Project Fax #:	
Describe Project:	5.52 Kw DC Roof Mount ? Main panel upgrade	Living Area		Unit #	
		Garage		Lot #	
		Decks		Contract Price:	

OWNER NAME AND ADDRESS

Name:	Pitr Conroy				
Mailing Address:	2074 Pleasant Hill Rd				
City:	Sebastopol	State:	Ca	ZIP:	95472
Day Ph:	(707) 829-1265	Fax:	()		

APPLICANT NAME AND ADDRESS

Name:	Richard Steele				
Mailing Address:	706 Benjamins Rd				
City:	Santa Rosa	State:	CA	ZIP:	95409
Day Ph:	(707) 484-6299	Fax:	()		

CONTRACTOR INFORMATION

Company Name:	Richard Steele Construction inc.				
Address:	706 Benjamins Rd				
City:	Santa Rosa	State:	CA	ZIP:	95409
Day Ph:	(707) 484-6299	Fax:	()		

OTHER PERSONS (ARCHITECT, ENGINEER, ETC.)

Name:					
Address:					
City:		State:		ZIP:	
Day Ph:	()	Fax:	()		
License No:		Exp. Date:			

WORKER'S COMPENSATION DECLARATION

I hereby affirm under penalty of perjury one of the following declarations:
☐ I have and will maintain a certificate of consent to self-insure for worker's compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.
☒ I have and will maintain worker's compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My worker's compensation insurance carrier and policy number are:

Carrier: State Fund
Policy No: 611-0000299

(This section need not be completed if the permit is for one hundred dollars (\$100) or less).
☐ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the worker's compensation laws of California, and agree that if I should become subject to the worker's compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

Exp. Date: 10-1-10 Applicant: Richard Steele Construction

WARNING: FAILURE TO SECURE WORKER'S COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS (\$100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

OWNER-BUILDER DECLARATION

I hereby affirm under penalty of perjury that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractor's License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he or she is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars (\$500).):

☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044 Business and Professions Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or herself or through his or her own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he or she did not build or improve for the purpose of sale.).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractors License Law.).

☐ I am exempt under Sec. B & P.C. for this reason

By my signature below I acknowledge that, except for my personal residence in which I must have resided for at least one year prior to completion of the improvements covered by this permit, I cannot legally sell a structure that I have built as an owner-builder if it has not been constructed in its entirety by licensed contractors. I understand that a copy of the applicable law, Section 7044 of the Business and Professions Code, is available upon request when this application is submitted or at the following website: <http://www.leginfo.ca.gov/calaw.html>.

Date: Signature of Property Owner or Authorized Agent

LICENSED CONTRACTOR'S DECLARATION

I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

Lic. Class: B, C-10 Lic. No.: 905097

Exp. Date: 10/31/10 Contractor: Richard Steele Const. inc.

ASBESTOS DECLARATION

Written asbestos notification pursuant to Part 61 of Title 40 of the Code of Federal Regulations is required when asbestos exists in buildings, or portions thereof, undergoing demolition. I hereby declare that demolition authorized by this permit is from construction that () does () does not contain asbestos, or that () no demolition is authorized by this permit.

I certify that I have read this application and affirm under penalty of perjury that the above information is correct. I agree to comply with all local Ordinances and State laws relating to building construction. I hereby authorize representatives of the County of Sonoma to enter upon the above-mentioned property for inspection purposes. If, after making the Certificate of Exemption for the Worker's Compensation provision of the Labor Code I should become subject to such provisions, I will forthwith comply. In the event I do not comply with the Worker's Compensation Law, this permit shall be deemed revoked.

PERMITTEE SIGNATURE
706 Benjamins Rd Santa Rosa, CA 95409
ADDRESS CITY ZIP

☒ Contractor ☐ Owner ☐ Other Licensed Professional

THIS PERMIT SHALL EXPIRE IN THREE(3) YEARS FROM DATE FEES ARE PAID UNLESS OTHERWISE NOTED BY CODE ENFORCEMENT

CONSTRUCTION LENDING DECLARATION

I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued. (Sec. 3097, Civ. C.).

Lenders Name: Lenders Address:

FOR DEPARTMENT USE

Zoning	File No.	Acres		
Existing Use/Structures				
Proposed Use/Structures				
Zoning Min. Yard Requirements:	Front	Left	Right	Back
NOTE: Fire Safe Standards require all parcels greater than 1 Acre to have a min. 30' setback unless mitigated.				
<input type="checkbox"/> Mitigation Required				
Approval for Permit Issuance:				
By:				
Date:				
Conditions:				
Sewer Connection:	<input type="checkbox"/> Available	<input type="checkbox"/> Fees Paid		
Approved by:		Date:		

Road Encroachment:	<input type="checkbox"/> Fees Paid
Approved by:	Date:

Septic System Permit/Clearance #	
Approved by:	Date:

Flood Zone:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	100 Year Flood Elevation:
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Site Review

Drainage Review:

Approved by:	Date:
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Fire:

Approved by:	Date:
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Code Enforcement Violation	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Violation #
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This permit is limited to	days.
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Work Authorized
11 roof mounted PV system

Plans Approved	<input type="checkbox"/> Post FIRM	<input type="checkbox"/> Alquist Priolo Report Available
No Plans Submitted	<input type="checkbox"/> Pre FIRM	<input type="checkbox"/> Geotechnical report Available
Plancheck Cleared By	Date: 3/8/10	Type of Construction
Permit Cleared By	Date: 3/8/10	Occupancy
		No. of Stories
		No. of Bedrooms
		Auto. Fire Sprinklers Req'd
		No. of Units
		Certificate of Occupancy

PAYMENT RECD

\$ 429.14

MAR 08 2010

PERMIT AND RESOURCE
MANAGEMENT DEPARTMENT
COUNTY OF SONOMA

Distribution: White - File Canary - Applicant Blue - Assessor Cardstock - Inspector

JOB ADDRESS:

2074 Pleasant Hill Rd

PERMIT NUMBER:

B010-0794

INSPECTION AREA:

X

131)	SPECIAL INSPECTION REQUIRED		<input type="checkbox"/> YES	<input type="checkbox"/> NO	IF YES, SEE ADDITIONAL SHEET	
INSPECTION RECORD			DATE	NAME	REMARKS	
101)	ROUGH GRADING					
103)	FOUNDATION					
	FORMS/SETBACK					
	FOOTING					
	WALLS					
106)	UFER GROUND #					
104)	CAISSONS/PIERS					
105)	SLAB					
107)	UNDERGROUND UTILITIES					
110)	MASONRY					
109)	RETAINING WALLS					
113)	FIREPLACE					
	FOOTING					
	HEARTH/PROTECTION					
	THROAT					
114)	CHIMNEY					
120)	UNDERFLOOR/UNDERSLAB					
115)	HYDRONICS					
116)	U/F ELECTRICAL					
117)	U/F MECHANICAL					
118)	U/F PLUMBING					
119)	U/F FRAMING					
139)	U/F INSULATION					
126)	SHEAR WALLS					
	<input type="checkbox"/> INTERIOR		<input type="checkbox"/> EXTERIOR			
127)	DIAPHRAGMS					
	<input type="checkbox"/> ROOF		<input type="checkbox"/> FLOOR			
134)	SIDING/SHEATHING					
125)	HOLD DOWNS					
132)	CLOSE-IN					
122)	ROUGH ELECTRICAL					
123)	ROUGH MECHANICAL					
124)	ROUGH PLUMBING					
128)	ROUGH FRAME					
160)	SMOKE DETECTORS					
139)	INSULATION					
142)	WALLBOARD					
143)	FIREWALLS					
135)	STUCCO/PLASTER					
	<input type="checkbox"/> LATH		<input type="checkbox"/> SCRATCH			
137)	ROOFING					
130)	TUB/SHOWER PAN					
162)	FIRE DAMPERS/DOORS					
164)	SUSPENDED CEILING					
	<input type="checkbox"/> ROUGH ELEC.		<input type="checkbox"/> ROUGH MECH.			
165)	EXITING - RAMPS/STAIRS					
163)	HANDRAILS/GUARDRAILS					
	CORRIDORS/DOORS					
166)	ACCESSIBILITY COMPLIANCE					
144)	WATER TANKS					
	<input type="checkbox"/> SLAB		<input type="checkbox"/> WALLS			
170)	TEMPORARY OCCUPANCY					
171)	TEMPORARY ELECTRICAL					
172)	TEMPORARY GAS					
174)	ELECTRIC METER AUTHORIZATION		3-11-10 RP			
152)	PANEL BOARDS/SERVICE					
189)	SEPTIC ELECTRIC FINAL					
175)	GAS METER AUTHORIZATION					
153)	GAS PRESSURE TEST					
	HOUSE					
	YARD					
190)	MANUF. HOME FOUNDATION					
191)	MANUF. HOME INSTALLATION					
	CONTINUITY					
	STAIRS/SKIRTS					
	RIDGE BOLTING					
193)	MANUF. HOME COND. FINAL					
	SWIMMING POOLS					
194)	PRE-GUNITE					
195)	PRE-DECK					
196)	PRE-PLASTER/FENCE					
197)	VINYL/FIBERGLASS POOL EXCAVATION					
102)	GRADING FINAL					
176)	ELECTRICAL FINAL		3-15-10 RP			
177)	MECHANICAL FINAL					
178)	PLUMBING FINAL					
199)	FINAL		3-15-10 RP			
OCCUPANCY (OK TO OCCUPY)					PLAN RETENTION REQUIRED	
					<input type="checkbox"/> Yes <input type="checkbox"/> No	

- 650) SUSMP INSPECTION
- 651) NPDES EROSION COMPLIANCE
- 652) NPDES SEDIMENT COMPLIANCE
- 653) NPDES DOCS/SWPPP

FIRE INSPECTION REQUIRED		DATE	NAME
<input type="checkbox"/> Yes <input type="checkbox"/> No			
759)	KNOX BOX		
760)	PROPANE TANK HOLD DOWNS		
770)	SPRINKLER FINAL		
771)	ABOVEGROUND HYDROSTATIC		
772)	UNDERGROUND HYDROSTATIC		
773)	UNDERGROUND FLUSH		
774)	THRUST BLOCKS		
775)	PIPE WELD		
776)	HYDRANTS/APPLIANCES		
777)	PUMP ACCEPTANCE		
778)	WATER SUPPLY/TANK		
779)	ALARM SYSTEM		
780)	HOOD & DUCT SYSTEM		
781)	ABOVEGROUND TANK/DISPENSER		
198)	FIRE FINAL		

CLEARANCES:

FIRE☐ Local☐ County

HEALTH DEPARTMENT

ZONING

SANITATION

PERMIT # B010-0794

10-01-11 3:25

★ **APPROVED 1074**

—AS NOTED—

PERMIT NO.

8010-0794

APPROVED BY

[Signature] 3/8/12

10066

PERMIT AND RESOURCE MANAGEMENT DEPARTMENT

APPROVED JOB COPY OF PLANS AND JOB CARDS TO BE ON JOB SITE.

BUILDER SHALL NOT DEVIATE FROM THE APPROVED WRITING. ANY CHANGES MADE TO THE PLAN SHALL BE MADE IN WRITING AND BE SUBJECT TO REJECTION OF THE WORK.

FIRE SAFE STANDARDS

APPROVAL OF THESE PLANS, SPECIFIC TO, AND CAN NOT AUTHORIZE DEVIATION FROM. COMPLETE COMPLIANCE WITH CODE REQUIREMENTS. SECOND INSPECTIONS WHEN REQUIRED AND FIELD INSPECTION.

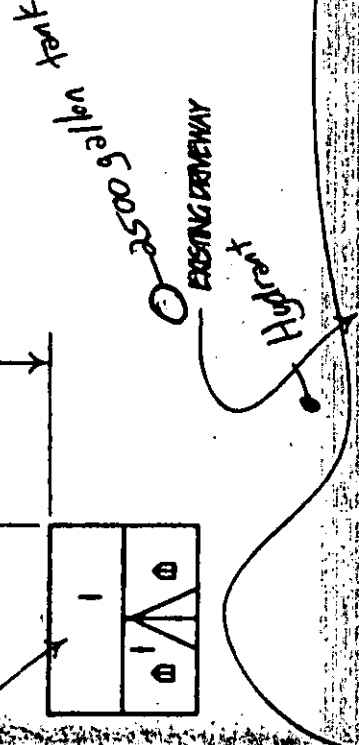
PLEASE READ ALL PERTINENT SECTIONS OF APPLICABLE CODES.



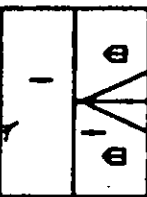
Handwritten notes: 1001300, 3001300, 2001300

PLEASANT HILL ROAD

10200



PROPOSED DRIVE



PERMIT AND RESOURCE MANAGEMENT DEPARTMENT

MAR 05 2010
[Signature]

★ **APPROVED** ★
BUILDING PLAN CHECK

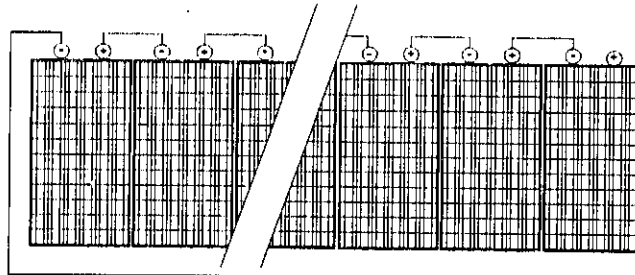
FILE COPY
8-010-0794

01 21

Solar Module Array 1
(12) Sharp ND-U230UC1, 230-watt
modules. Wired as a single series string.

Solar Module Specs:

Sharp ND-U230C1
Pm = 230w
Voc = 37.0vdc
Vpm = 30.3vdc
Isc = 8.24A
Ipm = 7.60A
Series Fuse: 15A

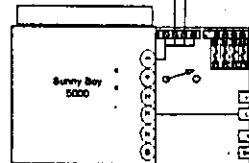


Solar Array 2
(12) Sharp 230-watt
modules wired in single
series string, same as
above

PV Source Circuits
Isc of 8.24 x 1.58 = 12.85A
Ampacity required.
Typical wire type: 10ga CU wire,
USE-2 in free air, or THHN-2/THWN-2 in
conduit. Positive, Negative and Ground

Inverter Specs:

SMA Sunny Boy 5000US
AC Volts 240vac
Max AC Amps 21.0A
MPPT Window 250-480vdc
Max DC Volts 600vdc
Max DC Amps 21.0A
CEC Rating 95.5%



30A, 2-pole circuit breaker
(Best practice places inverter
input breaker(s) at opposite end
of busbar from main breaker.)

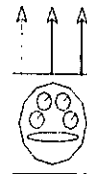
AC Output Circuit
Inv Max Amps of 21.0 x 1.25 = 26.25A
Ampacity required.
L1, L2, Neutral & Ground
(Best practice limits voltage drop to 1.5% at
inverter max amps output)

~~AC Disconnect~~
~~Lockable, visible~~
~~30 amp~~
(Not required by NEC, may
be required by local utility
company or local AHJ)

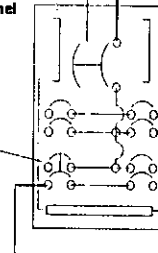
Note: Sum of input breakers may not
exceed 120% of busbar capacity

#8 AWG (CU) system grounding
electrode conductor.

Utility Grid
120/240 vac



House Main AC Panel



<p>DC POWER SYSTEMS Inc.</p> <p>DC Power Systems</p> <p>103 W. North St. HEALDSBURG, CA 95448 PH: 707-433-5824 FAX: 707-433-5838</p>	<p>This line diagram is provided as a service and is based on our understanding of the information supplied and current requirements. Subject to revision based on actual conditions, applicable edition of the National Electrical Code and governmental authorities.</p> <p>Copyright 2008 DC Power Systems Inc. All rights reserved.</p>	<p>CONTRACTOR:</p>	<p>OWNER:</p> <p>SITE ADDRESS:</p>	<p>DWG NAME: RGT 24-Sh230 SB5000US</p> <p>SYSTEM TYPE: Gnd-Tied Photovoltaic System, 5520 watts (STC)</p> <p>DRAWN BY: Doug Pratt</p> <p>SCALE: None</p> <p>DWG DATE: 8/19/2009</p> <p>DWG No: 1</p> <p>REV: 1.0</p>
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Technical Data

Sunny Boy 5000 / 6000 / 7000

Input Data (DC)

Max. Recommended Array Input Power (DC @ STC)
Max. DC Voltage
Peak Power Tracking Voltage
DC Max. Input Current
DC Voltage Ripple
Number of Fused String Inputs
PV Start Voltage (adjustable)

Output Data (AC)

AC Nominal Power
AC Maximum Output Power
AC Maximum Output Current (@ 208, 240, 277 V)
AC Nominal Voltage / Range

AC Frequency / Range

Power Factor

Efficiency

Peak Inverter Efficiency
CEC weighted Efficiency

Mechanical Data

Dimensions W x H x D in inches
Weight / Shipping Weight
Ambient temperature range
Power Consumption: standby / nighttime
Topology

Cooling Concept

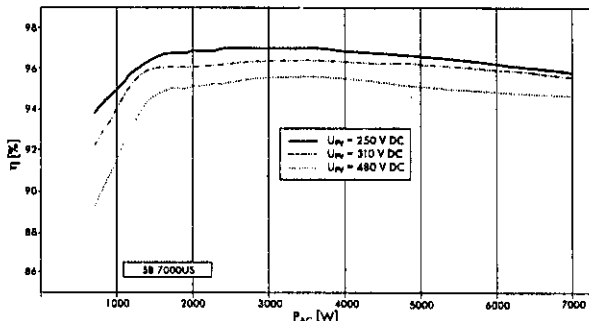
Mounting Location Indoor / Outdoor (NEMA 3R)

Features

LCD Display
Lid Color: aluminum / red / blue / yellow
Communication: RS485 / Wireless
Warranty: 10-year
Compliance: IEEE-929, IEEE-1547, UL 1741, UL 1998, FCC Part 15 A & B

Specifications for nominal conditions

Efficiency Curves

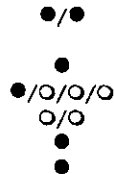


SB 5000US

6250 W
600 V
250 - 480 V
21 A
< 5%
4
300 V
5000 W
5000 W
24 A, 20.8 A, 18 A
183 - 229 V @ 208 V
211 - 264 V @ 240 V
244 - 305 V @ 277 V
60 Hz / 59.3 Hz - 60.5 Hz
1

96.8 %
95.5 % @ 208 V
95.5 % @ 240 V
95.5 % @ 277 V

18.4 x 24.1 x 9.5
143 lbs / 154 lbs
-13 to +113 °F
< 7 W / 0.25 W
PWM, true sinewave,
current source
Convection with
regulated fan cooling

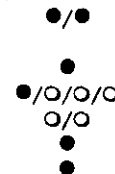


SB 6000US

7500 W
600 V
250 - 480 V
25 A
< 5%
4
300 V
6000 W
6000 W
29 A, 25 A, 21.6 A
183 - 229 V @ 208 V
211 - 264 V @ 240 V
244 - 305 V @ 277 V
60 Hz / 59.3 Hz - 60.5 Hz
1

97.0 %
95.5 % @ 208 V
95.5 % @ 240 V
96.0 % @ 277 V

18.4 x 24.1 x 9.5
143 lbs / 154 lbs
-13 to +113 °F
< 7 W / 0.25 W
PWM, true sinewave,
current source
Convection with
regulated fan cooling

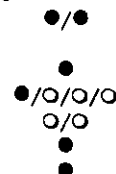


SB 7000US

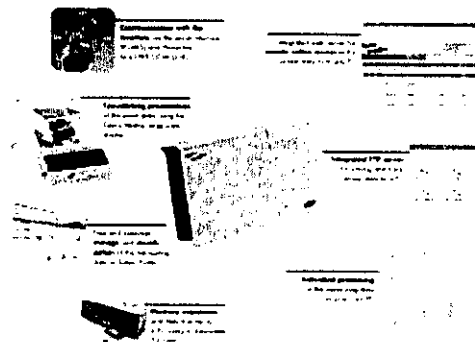
8750 W
600 V
250 - 480 V
30 A
< 5%
4
300 V
7000 W
7000 W
34 A, 29 A, 25.3 A
183 - 229 V @ 208 V
211 - 264 V @ 240 V
244 - 305 V @ 277 V
60 Hz / 59.3 Hz - 60.5 Hz
1

97.1 %
95.5 % @ 208 V
96.0 % @ 240 V
96.0 % @ 277 V

18.4 x 24.1 x 9.5
143 lbs / 154 lbs
-13 to +113 °F
< 7 W / 0.25 W
PWM, true sinewave,
current source
Convection with
regulated fan cooling



● Included ○ Option — Not available



www.sma-america.com
Phone 530-273-4895
Toll Free 888-4SMAUSA

SMA America, Inc.

230 WATT

ND-U230C1

NEC 2008 Compliant

Module output cables now 12 AWG with locking connectors

ELECTRICAL CHARACTERISTICS

Maximum Power (Pmax)	230 W
Tolerance of Pmax	+10% / -5%
Type of Cell	Polycrystalline silicon
Cell Configuration	60 in series
Open Circuit Voltage (Voc)	37.0 V
Maximum Power at Voltage (Vpm)	30.3 V
Short Circuit Current (Isc)	8.24 A
Maximum Power at Current (Ipm)	760 A
Module Efficiency (%)	14.1%
Maximum System (DC) Voltage	600 V
Series Fuse Rating	15 A
NOCT	47.5°C
Temperature Coefficient (Pmax)	-0.485% / °C
Temperature Coefficient (Voc)	-0.36% / °C
Temperature Coefficient (Isc)	0.053% / °C

Note: tested at STC (Standard Test Conditions) 25°C, 1kW/m² irradiation, AM 1.5

MECHANICAL CHARACTERISTICS

Dimensions (A x B x C below)	39.1" x 64.6" x 1.67/994 x 1640 x 46 mm
Cable Length (I)	45.3"/100 mm
Output Interconnect Cable**	12 AWG with MC4 Locking Connector
Weight	44 lbs / 20 kg
Max Load	50 psf (2400 Pascals)

A safety lock up (Shut-Off) switch part number PVSS5H4 may be required in certain accessible locations per NEC 2008 690.53 (C)

QUALIFICATIONS

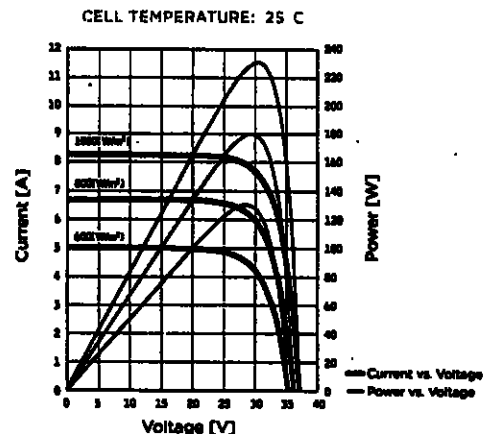
UL Listed	UL 1703
Fire Rating	Class C



WARRANTY

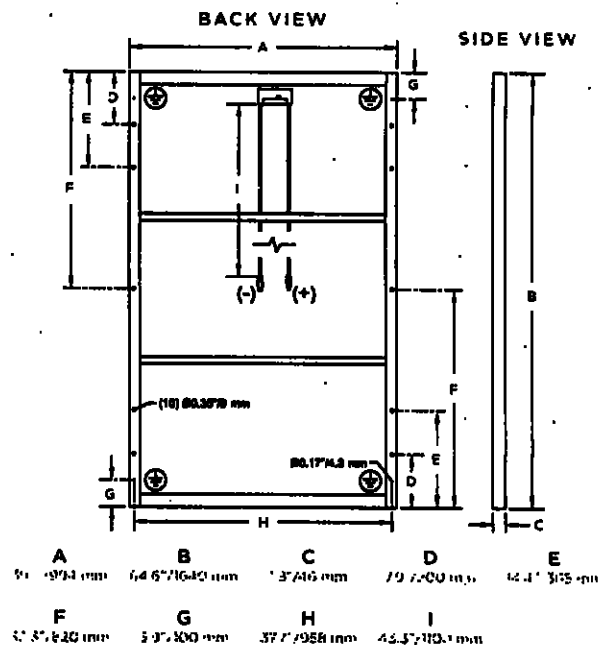
25-year limited warranty on power output
Contact Sharp for complete warranty information

IV CURVES



CURRENT, POWER VS. VOLTAGE CHARACTERISTICS

DIMENSIONS



Contact Sharp for telephony specification.

SHARP

SHARP ELECTRONICS CORPORATION
5901 Bolsa Avenue, Huntington Beach, CA 92647
1-800-SOLAR-06 • Email: sharpsolar@sharpusa.com
www.sharpusa.com/solar