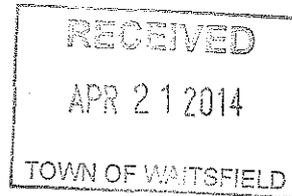




Aegis Renewable Energy
340 Mad River Park, Suite 6
Waitsfield, VT 05673
Office 802.496.5155
Email: nbehn@aegis-re.com



4-18-14

Dear Waitsfield Select Board Members,

We would like to inform you that the Town of Waitsfield intends to place a ground mount photovoltaic solar array at the Town Garage, located at 761 Tremblay Road, Waitsfield, VT 05673.

The Public Service Board asked that we notify you. Enclosed you will find a copy of the Certificate for Public Good Permit Application. Please feel free to contact us directly if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to be 'Nils Behn', written in a cursive style.

Nils Behn
CEO

Attachments

Town of Waitsfield CPG Application

Table of Contents:

- 1. CPG Application**
- 2. Group System Information**
- 3. List of Group Meters**
- 4. List of Notified Parties**
- 5. Environmental Information Section 8**
- 6. Satellite Photos**
- 7. Map View of Waitsfield Town Garage Location**
- 8. Module Information TSM PA 14**
- 9. Inverter Information SMA 11,000 & 8,000**

State of Vermont Public Service Board

Application for a Certificate of Public Good for Net Metered Power Systems that are Non-Photovoltaic Systems Up to 150 kW (AC) in Capacity; or Photovoltaic Systems Greater Than 15 kW (AC) and up to 150 kW (AC) in Capacity¹

Net Metering Customer Name (please print): Town of Waitsfield

General Instructions:

Applicants must complete sections 1-3 and any other sections applicable to the type of system to be installed. Specific instructions for each type of system are included under the applicable section. For example, an applicant for a wind turbine system must complete sections 1-3, 5 and 8. **Failure to complete all applicable sections of this application may result in delay or denial.** Once the application form is completed, the applicant must mail the applicable sections of the completed application to the Public Service Board, the Vermont Department of Public Service, the applicant's respective utility, and to all other parties as specified in each of the sections applicable to the net metering project. For example, an applicant for a photovoltaic system installed on an existing structure is required to mail copies to the Public Service Board, the Department of Public Service, and his or her utility. Applicants must also submit a list of the persons that they have mailed a copy of the application to in accordance with the instructions for each type of installation along with the completed application. It is recommended that the applicant contact their utility *prior to applying for a certificate* in order to determine whether the utility's capacity regarding net metering projects has been met, and any utility specific requirements. Please contact the Public Service Board at (802) 828-2358 if you have any questions regarding this application form.

Notice To Those With Concerns About The Net Metering Proposal

If you have received a copy of this application, you have the opportunity to comment on the project and to request a hearing before the Public Service Board to raise any concerns you may have regarding this project. For all systems *with the exception of photovoltaic systems on existing structures*, if you wish to comment to the Public Service Board about this proposal or request a hearing, you must file your comments with the Board and the applicant within 30 days of the date that the application was sent to the Board and all required parties; if you wish to request a hearing, you must include your request with your comments. With respect to photovoltaic systems on existing structures, if you wish to comment to the Public Service Board about this proposal, you must file the comments and any request for a hearing with the Board and the applicant within *ten* working days of the date that the application was sent to the Public Service Board and all required parties. If you request a hearing, you must make a showing that the application raises a significant issue regarding one or more of the substantive criteria pursuant to 30 V.S.A. ' 248. The Board may determine to hear evidence on the issue if it concludes that the project raises a significant issue with respect to one or more of those substantive criteria. Comments and requests must be in writing and sent to the Board at 112 State Street, 4th Floor, Montpelier, VT 05620-2701. If you have any questions, contact the Clerk of the Public Service Board at (802) 828-2358, e-mail address: psb.clerk@state.vt.us.

¹ Applicants for photovoltaic systems of 15 kW or less in capacity must use the Board's Net Metering Registration Form.

Customer Information**- Section 1.**

(Please print all information clearly)

Net Metering Customer Name: Town of WaitsfieldService Address (please include street name and number; no P.O. boxes: 761 Tremblay RoadTown/City/State: Waitsfield, VTZip Code: 05673Mailing Address (if different from above): 9 Bridge Street, Waitsfield, VT 05673Daytime telephone: 802-496-2218

Utility & Account #: Green Mountain Power

NM Priority	Account #	Customer	Meter Location
1	TBD- NEW TOWN OFFICE BUILDING	TOWN OF WAITSFIELD	WAITSFIELD TOWN (NEW TOWN OFFICE BUILDING) RT 100 WAITSFIELD, VT 05673
2	42790000006	TOWN OF WAITSFIELD	WAITSFIELD TOWN ELEM SCHOOL RT 100 SCHOOL WAITSFIELD, VT 05673
3	62790000004	TOWN OF WAITSFIELD	WAITSFIELD TOWN FIRE STATION 4103 RT 100 WAITSFIELD, VT 05673
4	62690000005	TOWN OF WAITSFIELD	WAITSFIELD TOWN OF TREMBLAY RD SHED WAITSFIELD, VT 05673
5	52790000005	TOWN OF WAITSFIELD	WAITSFIELD TOWN OF-WAIT HOUSE 4061 RT 100 WAITSFIELD, VT 05673
6	59790000000	TOWN OF WAITSFIELD	WAITSFIELD TOWN OF 9 BRIDGE ST WAITSFIELD, VT 05673
7	09790000005	TOWN OF WAITSFIELD	WAITSFIELD TOWN OF LIBRARY 9 BRIDGE ST WAITSFIELD, VT 05673

Property owner name (if different than above): Same

Mailing
address: _____

Town/City/State: _____

Zip Code: _____

Daytime Telephone: _____

Is this an amendment to an existing system? If so, please indicate the existing CPG No. No
Date application was sent to the Public Service Board and other parties as required by type of net metering
project: _____

Applicant must indicate the date the application was sent to the Board and other parties, and also submit a
list of the names and addresses of the parties notified of this application along with the completed
application.

Installer Information - Section 2.

(Please print all information clearly)

Installer Name: Aegis Renewable Energy

Mailing Address: 340 Mad River Park, Suite 6

Town/City/State: Waitsfield, VT

Zip Code: 05673

Daytime Telephone: 802-496-5155

e-mail address: nbehn@aegis-re.com

Certification**- Section 3.**

The undersigned declares, under the pains and penalties of perjury, that:

- (1) having exercised due diligence and made reasonable inquiry, the information which I have provided on this form and any attachments is true and correct to the best of my knowledge;
- (2) the project for which this application seeks approval is in compliance with the land conservation measures contained in the applicable Town Plan which would apply if the project were not subject to 30 V.S.A. ' 248;
- (3) the project is in compliance with all applicable state and federal requirements and has the necessary approvals for operation of this type of system;
- (4) any waste generated by the construction of this project will be disposed of at a state-approved disposal facility;
- (5) any construction activities will follow the recommendations of *the Vermont Erosion Control Handbook* (available from the Agency of Natural Resources, 1-802-828-1535 or anr.wsmdstormwatergeneral@state.vt.us);
- (6) the system will be installed in compliance with the interconnection safety and technological requirements of Public Service Board Rule 5.100; and
- (7) I have sent a copy of this complete application to all parties as required by this form.
- (8) Site preparation or construction of the project will not commence until a certificate of public good is issued.

Making false or misleading statements on this application is subject to penalties under 30 V.S.A. ' 30 and/or revocation of any approval granted.

Customer Signature

Paul Hartshorn Chair Select mem

Date: 4-7-14

Installer Signature

[Signature] CEO Agis Renewable Energy

Date: 4-7-14

If installing a photovoltaic (PV) system, complete Section 4.*

If installing a wind system complete, Sections 5 and 8.

If installing another type of net metering system, complete Sections 6 and 8.

If installing a group system, complete the sections applicable to the net metering system employed and Section 7.

***Ground mounted PV systems must complete Section 8 (environmental information). See instructions in Section 4 below.**

Photovoltaic System (PV) Information

- Section 4.

PV Module Manufacturer: Trina Solar, Limited

Module Model Number: PA 14 (300 watts)

Number of Modules: 341

Power Rating per Module: 300 DC Watts

Total Array Output: 102.3 KW DC Watts (no. of modules x power rating)

System Capacity: 86 kW AC Watts (AC Nameplate Capacity of the Inverter(s))

Inverter Manufacture: SMA

Inverter Model Number: (7) SB 11000TLUS-12-240VAC & (1) SB 8000US-11-240VAC

Describe the physical location of the installation and/or mounting structure: The PV array will be located at the waitsfield town garage behind the garage building and hidden from public view.

Describe the physical location of the facilities lockable disconnect switch: The facilities lockable disconnect switch will be located on a back panel adjacent to the solar array at the Waitsfield town garage.

Installation Type (*please circle one*): an existing home or business; a new home or business, ground mount; other (please describe) _____

If you are installing a system that is not attached to an existing or new home or business, you must also complete Section 8 of this application.

Notice Requirements:

If you are installing a PV system on a new or existing home or business, you must send copies of this application to the Public Service Board at 112 State Street, 4th Floor, Montpelier, VT 05620-2701; the Vermont Department of Public Service at 112 State Street, 3rd Floor, Montpelier, VT 05620-2601; and your utility.

If you are otherwise installing your PV system on a new structure, such as a pole-mounted system, then you must send a copy of the application to the Public Service Board; the Vermont Department of Public Service; your utility; the Planning Division, Agency of Natural Resources, 1 National Life Drive, Davis 2, Montpelier, VT 05620-3901; your local planning commission; the municipal legislative body for the town in which the system is to be installed (typically, the selectboard); and all adjoining landowners.

Please note that all applicants must submit a list of the parties notified along with the completed application.

Wind System Information**- Section 5.**

Wind Turbine
Manufacturer: _____

Turbine Model
Number: _____

Turbine Tower Height: _____ ft

Turbine Tower Diameter _____ ft

Rotor Diameter: _____ ft

Wind Turbine Power Output: _____ Watts
(Peak output up to 30mph wind speed)

AC Source (circle one): Inverter Synchronous Generator Induction Generator

Describe the physical location of the installation and/or mounting structure:

Describe the physical location of the facility=s lockable disconnect switch:

If using an inverter, complete the following:

Inverter

Manufacturer: _____

Inverter Model

Number: _____

Inverter=s Continuous AC Rating: _____ AC Watts

System Rated Output: _____ AC Watts (wind turbine power output x .95)

All applicants for wind systems must also complete Section 8 (Environmental Information) below.

Notice Requirements:

If interconnecting a wind system, you must send copies of this application to the Public Service Board at 112 State Street, 4th Floor, Montpelier, VT 05620-2701; the Vermont Department of Public Service, 112 State Street, 3rd Floor, Montpelier, VT 05620-2601; your utility; your local planning commission; the municipal legislative body for the town in which the system is to be installed (typically, the selectboard); the Planning Division, Agency of Natural Resources, 1 National Life Drive, Davis 2, Montpelier, VT 05620-3901; and your adjoining landowners.

Please note that all applicants must submit a list of the parties notified along with the completed application.

Other Types of Systems**- Section 6.**

Description of the type of net metering system employed (fuel cell, hydroelectric, biomass, etc.): _____

Manufacturer: _____

Model _____

Number: _____

Rated Power Output (AC continuous): _____

System Rated Output (power output x .95) : _____ AC Watts

AC Source (circle one): Inverter Synchronous Generator Induction Generator

Describe the physical location of the installation and/or mounting structure:

Describe the physical location of the facility's lockable disconnect switch:

If using an inverter, complete the following:

Inverter

Manufacturer: _____

Inverter Model _____

Number: _____

Inverter's Continuous AC Rating: _____ AC Watts

Describe the physical location of the installation and/or mounting structure:

Describe the physical location of the facility's lockable disconnect switch:

All applicants for systems under this section must also complete Section 8 (Environmental Information) below.

Applicants for hydroelectric and biomass systems must submit copies of all necessary federal and state approvals for the project along with this application.

Applicants for biomass systems that utilize off-site waste resources must provide a detailed description of any waste transportation, storage, and handling related to the project.

Notice Requirements:

If interconnecting a system, you must send copies of this application to the Public Service Board at 112 State Street, 4th Floor, Montpelier, VT 05620-2701; the Vermont Department of Public Service, 112 State Street, 3rd Floor, Montpelier, VT 05620-2601; your utility; your local planning commission; the municipal legislative body for the town in which the system is to be installed (typically, the selectboard); the Planning Division, Agency of Natural Resources, 1 National Life Drive, Davis 2, Montpelier, VT 05620-3901; and your adjoining landowners.

Please note that all applicants must submit a list of the parties notified along with the completed application.

Please note that in order for a system to be eligible for net metering it must employ a renewable energy source that is being consumed at a harvest rate at or below its natural regeneration rate, pursuant to Board Rule 5.100.

Group System Information**- Section 7.**

If interconnecting a group system, applicants must provide the required application information corresponding to the type of net metering system(s) to be constructed as outlined in sections 4-6. In addition, applicants must also

provide on a separate sheet:

Please see attachment

- (1) the meters to be included in the group system identified by account number and location;
- (2) the procedure for adding and removing meters included in the group system, and direction as to the manner in which the serving utility shall allocate any accrued credits among the meters in the group;
- (3) a designated person, including address and telephone number, responsible for all communications from the system to the serving electric utility, except for communications related to billing, payment, and disconnection; and
- (4) a binding process for the resolution of any disputes within the group system relating to net metering that does not rely on the serving electric utility, the Public Service Board or the Department of Public Service.

Please note that all meters included in a group system must be within the same electric utility service territory in which the generation facility is located.

Environmental Information

- Section 8.

You must complete this section if you are installing any one of the following:

- X A PV system on a new structure which is not a home or a business under Section 4**
- X A wind system under Section 5**
- X A system under Section 6**

1. State whether the system will be sited on, near, or within any of the following (*answer yes or no*): a floodway NO shoreline NO stream NO wetland NO historic site or district NO rare and irreplaceable natural area NO necessary wildlife habitat NO area where an endangered species is present NO

If the answer to any one of the foregoing is yes, please attach a separate sheet:

- (a) showing the location of the system in relation to the resource, and
 - (b) stating the impact which the system, including its installation, will have on the protected resource and what measures, if any, will be taken to minimize any such impact.
2. On a separate sheet, describe the visible and aesthetic impact of the project and why it will not have an undue adverse effect on aesthetics and the scenic and natural beauty of the area. Describe the location of the facility in relation to adjoining properties and include a specific statement about the visibility of the facility from adjoining properties; and, if it is highly visible, what measures you have taken, if any, to minimize the visible impact.



Group System Information:

Section 7 of the Application for a Certificate of Public Good for a Net Metered Power System

Net Metering Customer:

Town Of Waitsfield
9 Bridge Street
Waitsfield, VT 05673

Questions:

1. The meters to be included in the group system identified by account number and location;

Utility & Account #:

Utility: Green Mountain Power

List of Group Net Metered Account #'s:

NM Priority	Account #	Customer	Meter Location
1	TBD- NEW TOWN OFFICE BUILDING	TOWN OF WAITSFIELD	WAITSFIELD TOWN (NEW TOWN OFFICE BUILDING) RT 100 WAITSFIELD, VT 05673
2	42790000006	TOWN OF WAITSFIELD	WAITSFIELD TOWN ELEM SCHOOL RT 100 SCHOOL WAITSFIELD, VT 05673
3	62790000004	TOWN OF WAITSFIELD	WAITSFIELD TOWN FIRE STATION

			4103 RT 100 WAITSFIELD, VT 05673
4	62690000005	TOWN OF WAITSFIELD	WAITSFIELD TOWN OF TREMBLAY RD SHED WAITSFIELD, VT 05673
5	52790000005	TOWN OF WAITSFIELD	WAITSFIELD TOWN OF-WAIT HOUSE 4061 RT 100 WAITSFIELD, VT 05673
6	59790000000	TOWN OF WAITSFIELD	WAITSFIELD TOWN OF 9 BRIDGE ST WAITSFIELD, VT 05673
7	09790000005	TOWN OF WAITSFIELD	WAITSFIELD TOWN OF LIBRARY 9 BRIDGE ST WAITSFIELD, VT 05673

2. The procedure for adding and removing meters included in the group system, and direction as to the manner in which the serving utility shall allocate any accrued credits among the meters in the group;

Adding and Removing Meters:

The procedure for adding or removing meters included in the group would be for the account holder of the meter to be added or removed to request in writing the addition or removal of the meter. This request shall include the identification of the account holder, account and meter for which addition or removal is requested, reasons for the action and an analysis of the impact of the requested action on the remainder of the group. For removal requests, the request and supporting information shall be provided to the Town Of Waitsfield's administrator with a minimum of sixty (60) days notice; for additions, thirty (30) days notice shall be provided.

Accrued Credits:

The list below is in order of importance for Net Metering. First account on list should be offset completely before applying credits to the next account on the list, and so on until the last account bill is offset.

List of Group Net Metered Account #'s:

Utility & Account #'s: Green Mountain Power

NM Priority	Account #	Customer	Meter Location
1	TBD- NEW TOWN OFFICE BUILDING	TOWN OF WAITSFIELD	WAITSFIELD TOWN (NEW TOWN OFFICE BUILDING) RT 100 WAITSFIELD, VT 05673
2	42790000006	TOWN OF WAITSFIELD	WAITSFIELD TOWN ELEM SCHOOL RT 100 SCHOOL WAITSFIELD, VT 05673
3	62790000004	TOWN OF WAITSFIELD	WAITSFIELD TOWN FIRE STATION 4103 RT 100 WAITSFIELD, VT 05673
4	62690000005	TOWN OF WAITSFIELD	WAITSFIELD TOWN OF TREMBLAY RD SHED WAITSFIELD, VT 05673
5	52790000005	TOWN OF WAITSFIELD	WAITSFIELD TOWN OF-WAIT HOUSE 4061 RT 100 WAITSFIELD, VT 05673
6	59790000000	TOWN OF WAITSFIELD	WAITSFIELD TOWN OF 9 BRIDGE ST WAITSFIELD, VT 05673
7	09790000005	TOWN OF WAITSFIELD	WAITSFIELD TOWN OF LIBRARY 9 BRIDGE ST WAITSFIELD, VT 05673

3. A designated person, including address and telephone number, responsible for all communications from the system to the serving electric utility, except for communications related to billing, payment, and disconnection;

Primary Contact:

Valerie Capels
9 Bridge Street
Waitsfield, VT 05673

Office: 802-496-2218

4. A binding process for the resolution of any disputes within the group system relating to net metering that does not rely on the serving electric utility, the Public Service Board or the Department of Public Service.

Any dispute within the group would be resolved through the following process: Any member of the group who feels aggrieved by an action of the group or by the action of another member of the group may state their concerns in writing, supported with appropriate documentation, and submit them to the person designated under item 3 above. Within thirty (30) days of receipt of this material, the person designated in item 3 above shall convene a meeting of the group to hear the concern and seek a resolution. Such resolution will be documented in writing and provided to all members of the group. In the event a resolution is not reached, the group will defer the matter to a mutually agreed upon mediator.

List of Group Net Metered Account #'s:

Utility & Account #'s: Green Mountain Power

NM Priority	Account #	Customer	Meter Location
1	TBD- NEW TOWN OFFICE BUILDING	TOWN OF WAITSFIELD	WAITSFIELD TOWN (NEW TOWN OFFICE BUILDING) RT 100 WAITSFIELD, VT 05673
2	42790000006	TOWN OF WAITSFIELD	WAITSFIELD TOWN ELEM SCHOOL RT 100 SCHOOL WAITSFIELD, VT 05673
3	62790000004	TOWN OF WAITSFIELD	WAITSFIELD TOWN FIRE STATION 4103 RT 100 WAITSFIELD, VT 05673
4	62690000005	TOWN OF WAITSFIELD	WAITSFIELD TOWN OF TREMBLAY RD SHED WAITSFIELD, VT 05673
5	52790000005	TOWN OF WAITSFIELD	WAITSFIELD TOWN OF-WAIT HOUSE 4061 RT 100 WAITSFIELD, VT 05673
6	59790000000	TOWN OF WAITSFIELD	WAITSFIELD TOWN OF 9 BRIDGE ST WAITSFIELD, VT 05673
7	09790000005	TOWN OF WAITSFIELD	WAITSFIELD TOWN OF LIBRARY 9 BRIDGE ST WAITSFIELD, VT 05673



CPG Application for a Net Metered Project

Customer Name: Town of Waitsfield

Location: 761 Tremblay Road

Waitsfield VT 05674

Names and Addresses of Notified Parties: Date Notification was sent: 4-18-14

1. Public Service Board

112 State Street, 4th Floor, Montpelier, VT 05620-2701

2. Vermont Department of Public Service

112 State Street, 4th Floor, Montpelier, VT 05620-2601

3. The Planning Division, Agency of Natural Resources

1 National Life Drive, Davis 2, Montpelier, VT 05620-3901

4. Green Mountain Power

163 Acorn Lane, Colchester, VT 05446

5. Waitsfield Planning Commission

9 Bridge Street, Waitsfield, VT 05673

6. Waitsfield Select Board

9 Bridge Street, Waitsfield, VT 05673

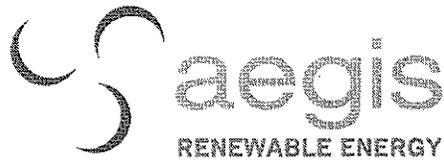
7. Aegis Renewable Energy

340 Mad River Park, Ste 6, Waitsfield, VT 05673

8. All Abutting Landowners:

See Below

Parcel ID	OWNER NAME	LOCATION	TOWN	ST	ZIP
03039.000	GREENE ROSS S	1015 NORTH RD	WAITSFIELD	VT	05673
03040.000	SOLOMON JON & MONTE	1131 NORTH ROAD	WAITSFIELD	VT	05673
03041.100	AVEDISIAN DARINE	1186 NORTH RD	WAITSFIELD	VT	05673
03042.000	GABAREE GEORGE S	982 NORTH RD	WAITSFIELD	VT	05673
03043.000	JACOBS RONALD	903 NORTH RD	WAITSFIELD	VT	05673
03044.000	DONKERLOOT JAMES N & ROBIN	972 NORTH RD	WAITSFIELD	VT	05673
15029.003	HADDEN ARNOLD	0 NORTH RD	WAITSFIELD	VT	05673
15030.000	WAITSFIELD TOWN OF	761 TREMBLAY RD	WAITSFIELD	VT	05673



CPG Application - Town of Waitsfield

Environmental Information - Section 8

2. On a separate sheet, describe the visible and aesthetic impact of the project and why it will not have an undue adverse effect on aesthetics and the scenic and natural beauty of the area. Describe the location of the facility in relation to adjoining properties and include a specific statement about the visibility of the facility from adjoining properties; and, if it is highly visible, what measures you have taken, if any, to minimize the visible impact.

Description of Visible and Aesthetic Impact:

The system will be located behind the Waitsfield Town Garage on Tremblay Road in Waitsfield. The garage and trees along the road will make it quite difficult to see the array from the road except for a partial glimpse as you drive by the entrance road to the garage. The array will sit on an area of solid fill that has only pioneer species of vegetation. The nearest residence is 300' away and is screened by tall piles of gravel, a solid wooden privacy fence and tree screening. The nearest residences with possible views of the array are at the Verd Mont trailer park which is 1,200' away.

Why it will not have undue adverse effect on aesthetics and scenic and natural beauty of the area:

The area where the system will be located has been used by the town as a solid fill area for decades. The placement of the array here will instigate a general cleanup and grading of the area and will allow the ground to heal because heavy machinery will now be excluded from the array field. There are no known sensitive flora or fauna resident to the location where the array will be placed. The image below shows the ANR map of the area surrounding the PV array and makes no indication of wetlands where the system will be installed. Further we can say there are no wetlands.

Location of Facility in Relation to Adjoining Properties and Visibility from Adjoining Properties:

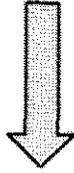
The nearest residence is 300' from the array as noted above. The next closest residences are 600' away. None of these residences have any possibility of seeing the array due to the abundant tree cover as well as the topography of the ground. The nearest residences with possible views of the array are at the Verd Mont trailer park which is 1,200' away.

Please see images below for more detail

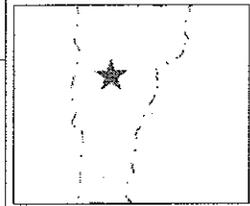


Overview of the area surrounding the Waitsfield Town Garage PV array. Area to be graded is outlined by white line. Areas to be cleared and selectively cleared are noted above and below the array respectively.

PV Array Location



Google Earth Street View image showing nearest vantage point to array from VT Route 100. Distance to this point from the array is 2,300' as shown in the map image below.



Legend

- ✈ Airports
- ▲ Mountains and Hills
- ↔ Interstates
- ↔ US Highways
- ↔ VT State Highways
- Rail Lines
- Town Boundaries
- Roads
- Class 1-3
- Class 4
- Driveways
- Rivers and Lakes
- Streams
- Intermittent
- Perennial
- Unassigned
- Buildings
- Wetlands - VSW
- 50 ft-coolbars
- Cities
- VT State Boundary

VT State Plane Meters NAD83

Scale: 1:2,523

0 250 500 750 ft.

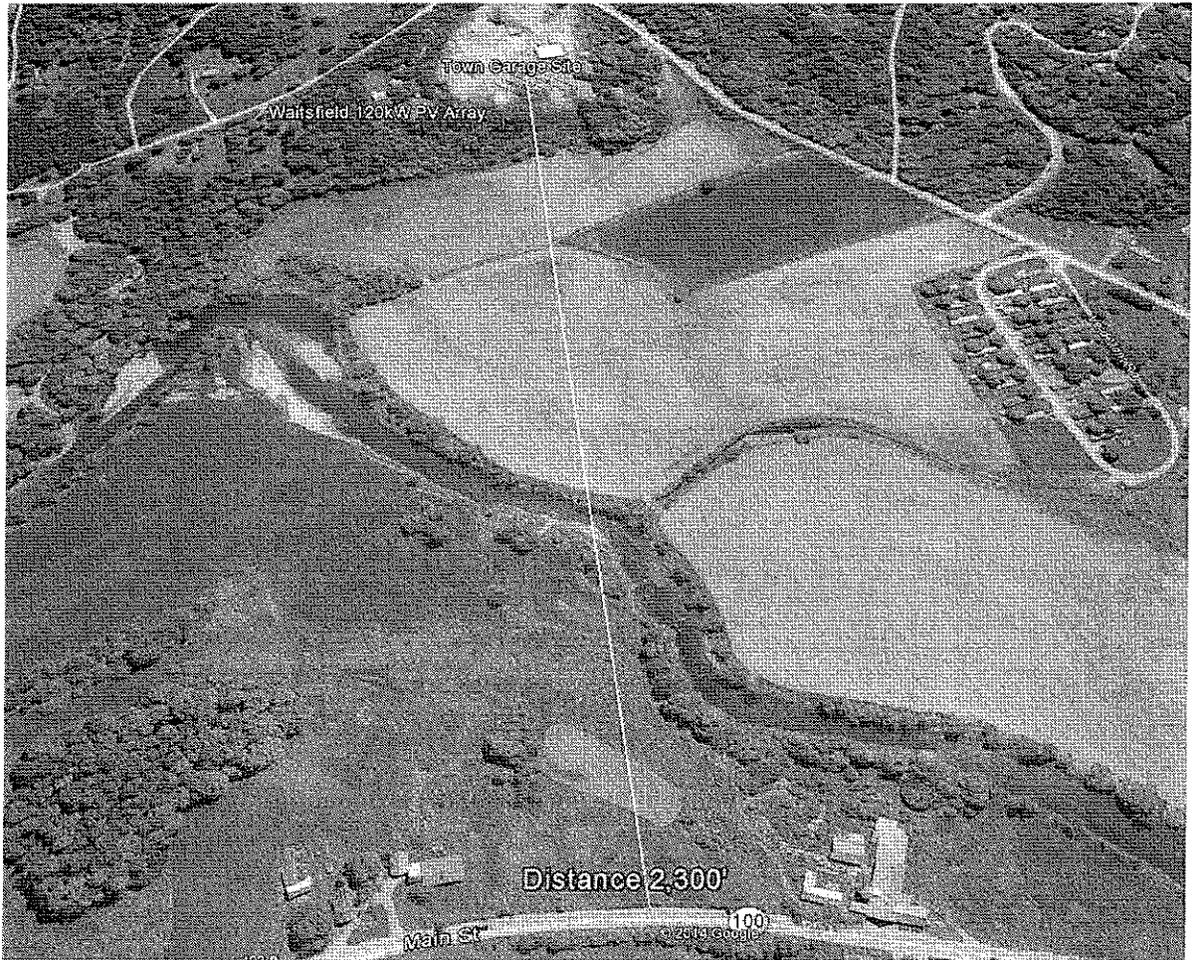
Map center: 476529, 189273

DISCLAIMER: This map is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. VCGI and the State of Vermont make no representations of any kind, including but not limited to the warranties of merchantability or fitness for a particular use, nor are any such warranties to be implied with respect to the data on this map.

URL: http://maps.vermont.gov/info/tae/VCGI_baseemap.jsp?launch.jsp



ANR Map showing no wetlands in the area where the Waitsfield PV array will be located



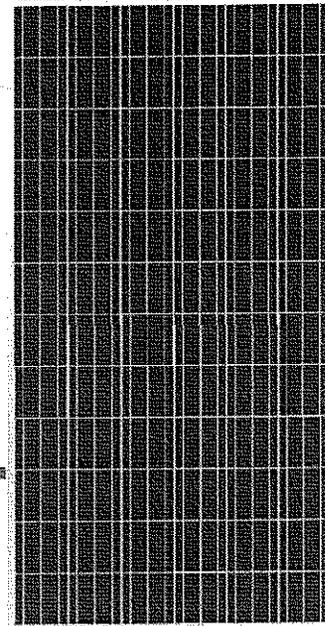


Town of Waitsfield – Town Garage 102.3kW DC PV array. The array is located behind the town garage off of Tremblay Road in Waitsfield. The system will tie in with a new service to the GMP single phase line at Tremblay Rd.



Street map showing location of Waitfield Town Garage.

TSM-PC14 TSM-PA14 THE UTILITY SOLUTION



15.7%
MAX EFFICIENCY

305W
MAX POWER OUTPUT

10 YEAR
PRODUCT WARRANTY

25 YEAR
LINEAR POWER WARRANTY

Founded in 1997, Trina Solar is one of the world's leading PV companies. Since its IPO on the NYSE in 2006, Trina Solar has developed a vertically integrated business model, with in-house production of ingots, wafers, cells and solar panels in both mono and multicrystalline technologies. Its manufacturing capacity for solar panels will be 2.4GW by the end of 2012, making it one of the largest solar manufacturers in the world. Trina Solar's extensive portfolio includes panels for all kinds of applications- residential, utility, offgrid, BIPV as well as innovative system solutions.

With 20 branch offices around the world, Trina Solar is serving leading installers, distributors, utilities and developers in all major PV markets. Trina Solar is committed to driving down the cost of solar and making it more affordable for all.

Trina Solar Limited
www.trinasolar.com



Module can bear snow loads up to 5400Pa and wind loads up to 2400Pa



Guaranteed power output
0~+3%



High performance under low light conditions
Cloudy days, mornings and evenings



Enhanced module durability with 4.0mm thick tempered glass



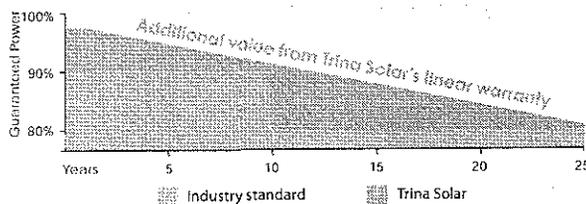
Manufactured according to International Quality and Environment Management System Standards
ISO9001, ISO14001



Approved original MC4 Photovoltaic connector used with highest reliability

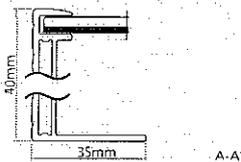
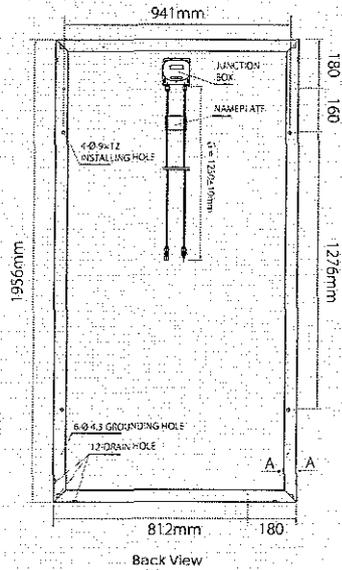
LINEAR PERFORMANCE WARRANTY

10 Year Product Warranty • 25 Year Linear Power Warranty

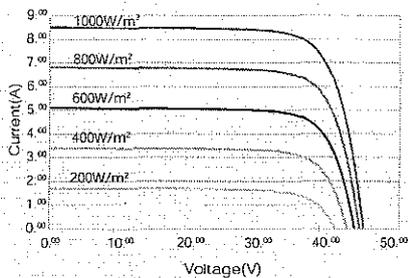


TSM-PC14 / TSM-PA14 Utility Scale Solar Module

DIMENSIONS OF PV MODULE TSM-PC/PA14



I-V CURVES OF PV MODULE TSM-290 PC/PA14



Average efficiency reduction of 4.5% at 200W/m² according to EN 60904-1.

CERTIFICATION



ELECTRICAL DATA @ STC

	TSM-285 PC/PA14	TSM-290 PC/PA14	TSM-295 PC/PA14	TSM-300 PC/PA14	TSM-305 PC/PA14
Peak Power Watts-P _{MAX} (Wp)	285	290	295	300	305
Power Output Tolerance-P _{MAX} (%)	0/+3	0/+3	0/+3	0/+3	0/+3
Maximum Power Voltage-V _{MPP} (V)	35.6	36.1	36.6	36.9	37.0
Maximum Power Current-I _{MPP} (A)	8.02	8.04	8.07	8.13	8.25
Open Circuit Voltage-V _{OC} (V)	44.7	44.9	45.2	45.3	45.4
Short Circuit Current-I _{SC} (A)	8.50	8.53	8.55	8.60	8.75
Module Efficiency η _{ref} (%)	14.7	14.9	15.2	15.5	15.7

Values at Standard Test Conditions STC (Air Mass AM1.5, Irradiance 1000W/m², Cell Temperature 25°C). Power measurement tolerance: ±3%

ELECTRICAL DATA @ NOCT

	TSM-285 PC/PA14	TSM-290 PC/PA14	TSM-295 PC/PA14	TSM-300 PC/PA14	TSM-305 PC/PA14
Maximum Power-P _{MAX} (Wp)	207	211	214	218	221
Maximum Power Voltage-V _{MPP} (V)	32.1	32.6	33.0	33.3	33.4
Maximum Power Current-I _{MPP} (A)	6.46	6.47	6.48	6.55	6.62
Open Circuit Voltage (V)-V _{OC} (V)	40.7	40.9	41.2	41.3	41.4
Short Circuit Current (A)-I _{SC} (A)	6.93	6.97	7.00	7.04	7.17

NOCT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s. Power measurement tolerance: ±3%

MECHANICAL DATA

Solar cells	Multicrystalline 156 × 156mm (6 inches)
Cell orientation	72 cells (6 × 12)
Module dimensions	1956 × 992 × 40mm (77 × 39.05 × 1.57 inches)
Weight	27.6kg (60.8 lb)
Glass	High transparency solar glass 4.0mm (0.16 inches)
Frame	Anodized aluminium alloy
J-Box	IP 67 rated
Cables	Photovoltaic Technology cable 4.0mm ² (0.006 inches ²), 1250mm (49.2 inches)
Connector	MC4

TEMPERATURE RATINGS

Nominal Operating Cell Temperature (NOCT)	45°C (±2°C)
Temperature Coefficient of P _{MAX}	-0.44%/°C
Temperature Coefficient of V _{OC}	-0.33%/°C
Temperature Coefficient of I _{SC}	0.046%/°C

MAXIMUM RATINGS

Operational Temperature	-40 ~ +85°C
Maximum System Voltage	1000V DC (IEC)/600V DC (UL)
Max Series Fuse Rating	15A

WARRANTY

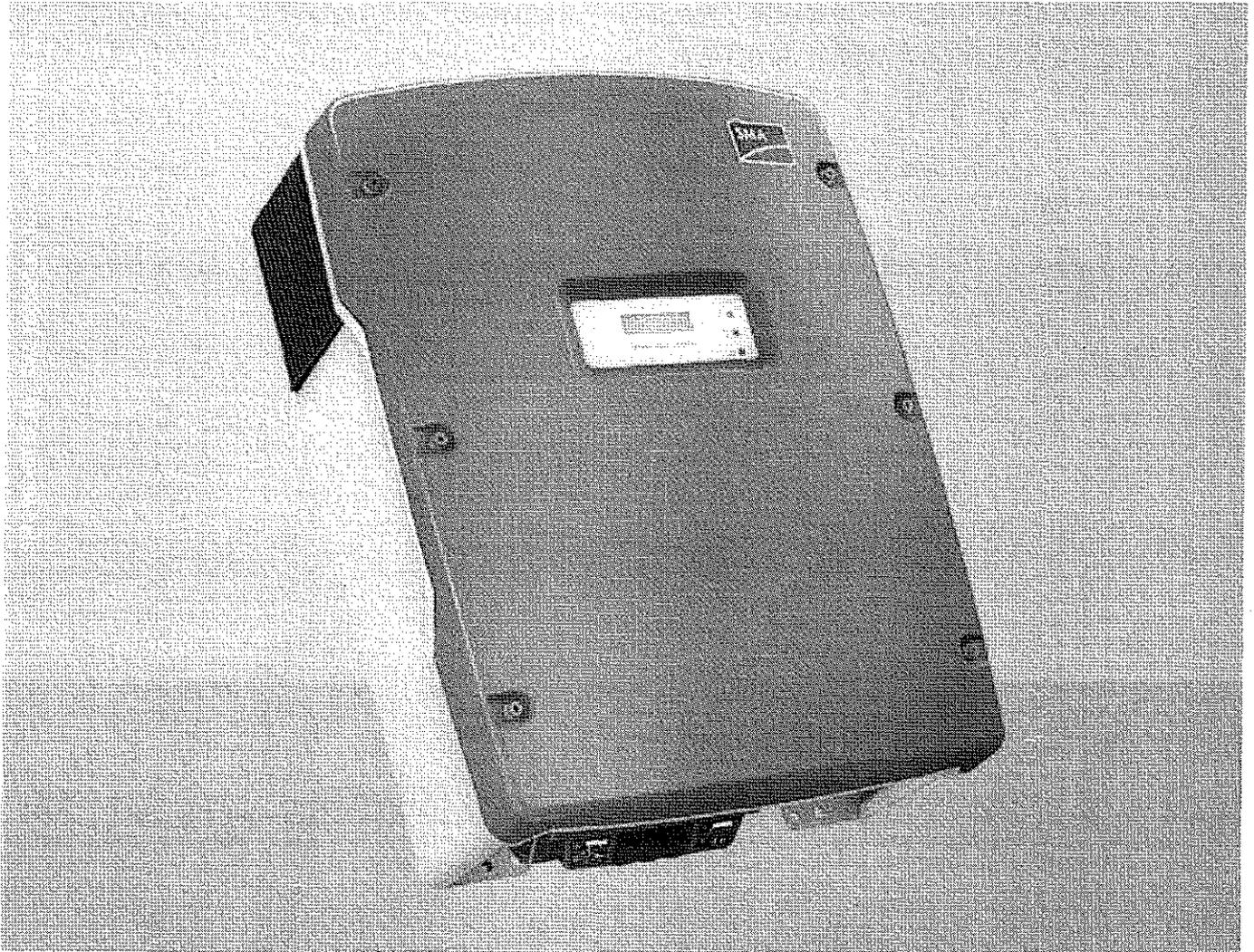
10 year workmanship warranty
25 year linear performance warranty
(Please refer to product warranty for details)

PACKAGING CONFIGURATION

Modules per box: 24 pcs
Modules per 40' container: 528 pcs

TSM_EN_Jun_2012

SUNNY MINI CENTRAL 9000TL / 10000TL / 11000TL with Reactive Power Control



Flexible

- Reactive power supply

High yields

- Maximum efficiency of 97.7 %
- Transformerless, with H5 topology
- OptiCool active temperature management

Reliable

- Pluggable SMA Power Balancer for three-phase power supply line
- Integrated ESS DC switch-disconnector
- Monitored string fuses

Simple

- SUNCLIX DC plug-in system

SUNNY MINI CENTRAL 9000TL / 10000TL / 11000TL with Reactive Power Control

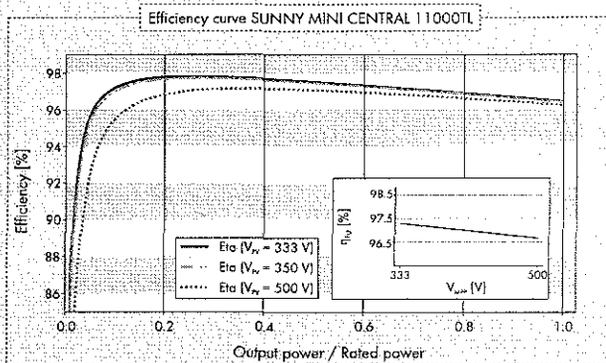
Optimum grid integration with reactive power supply

Sunny Mini Central inverters with Reactive Power Control are the ideal solution when utility companies demand reactive power supply. They can be used to realize plant designs which specify for the displacement factor $\cos \varphi$ and the corresponding percentage of reactive power. This way, large PV power stations can now make optimum use of grid distribution capacities, which significantly contributes to the success of renewable energy.

SUNNY MINI CENTRAL 9000TL / 10000TL / 11000TL

with Reactive Power Control

Technical Data	Sunny Mini Central 9000TL	Sunny Mini Central 10000TL
Input (DC)		
Max. DC power (@ cos φ= 1)	9300 W	10350 W
Max. input voltage	700 V	700 V
MPP voltage range / rated input voltage	333 V - 500 V / 350 V	333 V - 500 V / 350 V
Min. input voltage / initial input voltage	333 V / 400 V	333 V / 400 V
Max. input current	28 A	31 A
Max. input current per string	28 A	31 A
Number of independent MPP inputs / strings per MPP input	1 / 5	1 / 5
Output (AC)		
Rated output power (@230 V, 50 Hz)	9000 W	10000 W
Max. apparent AC power	9000 VA	10000 VA
Nominal AC voltage / range	220 V, 230 V, 240 V / 180 V - 265 V	220 V, 230 V, 240 V / 180 V - 265 V
AC power frequency / range	50 Hz, 60 Hz / -6 Hz ... +5 Hz	50 Hz, 60 Hz / -6 Hz ... +5 Hz
Rated power frequency / rated power voltage	50 Hz / 230 V	50 Hz / 230 V
Max. output current	40 A	44 A
Power factor at rated output power	1	1
Adjustable displacement factor	0.8 overexcited ... 0.8 underexcited	0.8 overexcited ... 0.8 underexcited
Feed-in phases / connection phases	1 / 1	1 / 1
Power balancing	●	●
Efficiency		
Max. efficiency / European efficiency	97.7% / 97.3%	97.7% / 97.2%
Protection		
Reverse current protection / input-side disconnection device	Optional (fuses) / ●	Optional (fuses) / ●
Ground fault monitoring / grid monitoring	● / ●	● / ●
DC reverse-polarity protection / AC short-circuit current capability / galvanically isolated	● / ● / -	● / ● / -
All-pole sensitive residual current monitoring unit	●	●
Protection class (according to IEC 62103) / overvoltage category (according to IEC 60664-1)	I / III	I / III
General Data		
Dimensions (W / H / D)	468 / 613 / 242 mm (18.4 / 24.1 / 9.5 in)	468 / 613 / 242 mm (18.4 / 24.1 / 9.5 in)
Weight	35 kg / 77.16 lb	35 kg / 77.16 lb
Operating temperature range	-25 °C ... +60 °C / -13 °F ... +140 °F	-25 °C ... +60 °C / -13 °F ... +140 °F
Noise emission (typical)	42 dB(A)	45 dB(A)
Self-consumption (night)	0.25 W	0.25 W
Topology	Transformerless	Transformerless
Cooling concept	OptiCool	OptiCool
Degree of protection (according to IEC 60529)	IP65	IP65
Degree of protection of connection area (according to IEC 60529)	IP65	IP65
Climatic category (according to IEC 60721-3-4)	4K4H	4K4H
Maximum permissible value for relative humidity (non-condensing)	100 %	100 %
Features		
DC terminal	SUNCLIX	SUNCLIX
AC terminal	Screw terminal	Screw terminal
Display	Text line	Text line
Interface: RS485 / Bluetooth	○ / ○	○ / ○
Warranty: 5 / 10 / 15 / 20 / 25 years	● / ○ / ○ / ○ / ○	● / ○ / ○ / ○ / ○
Certificates and approvals (more available on request)	CE, VDE0126-1-1; RD 1663/2000; RD 661/2007; EN 50438*; C10/11, PPDS, EC 61727; UTE C15-712-1	
Type designation	SMC 9000TLRP-10	SMC 10000TLRP-10



Accessories



RS485 interface
485PB-SMCNR



Bluetooth Piggy-Back
BTPB1NV-NR



SMA Power Balancer
Connection cable
PBL-YCABLE-10

* Does not apply to all national annexes to EN 50438.
 ● Standard features ○ Optional features — Not available
 Data at nominal conditions

Technical Data

Input (DC)

Max. DC power (@ $\cos \varphi = 1$)
 Max. input voltage
 MPP voltage range / rated input voltage
 Min. input voltage / initial input voltage
 Max. input current
 Max. input current per string
 Number of independent MPP inputs / strings per MPP input

Output (AC)

Rated output power (@230 V, 50 Hz)
 Max. apparent AC power
 Nominal AC voltage / range
 AC power frequency / range
 Rated power frequency / rated power voltage
 Max. output current
 Power factor at rated output power
 Adjustable displacement factor
 Feed-in phases / connection phases
 Power balancing

Efficiency

Max. efficiency / European efficiency

Protection

Reverse current protection / input-side disconnection device
 Ground fault monitoring / grid monitoring
 DC reverse-polarity protection / AC short-circuit current capability / galvanically isolated
 All-pole sensitive residual current monitoring unit
 Protection class (according to IEC 62103) / overvoltage category (according to IEC 60664-1)

General Data

Dimensions (W / H / D)
 Weight
 Operating temperature range
 Noise emission (typical)
 Self-consumption (night)
 Topology
 Cooling concept
 Degree of protection (according to IEC 60529)
 Degree of protection of connection area (according to IEC 60529)
 Climatic category (according to IEC 60721-3-4)
 Maximum permissible value for relative humidity (non-condensing)

Features

DC terminal
 AC terminal
 Display
 Interface: RS485 / Bluetooth
 Warranty: 5 / 10 / 15 / 20 / 25 years
 Certificates and approvals (more available on request)

Sunny Mini Central 11000TL

11400 W
 700 V
 333 V - 500 V / 350 V
 333 V / 400 V
 34 A
 34 A
 1 / 5
 11000 W
 11000 VA
 220 V, 230 V, 240 V / 180 V - 265 V
 50 Hz, 60 Hz / -6 Hz ... +5 Hz
 50 Hz / 230 V
 48 A
 1
 0.8 overexcited ... 0.8 underexcited
 1 / 1
 ●
 97.7% / 97.2%
 Optional (fuses) / ●
 ● / ●
 ● / ● / -
 ●
 I / III
 468 / 613 / 242 mm
 (18.4 / 24.1 / 9.5 in)
 35 kg / 77.16 lb
 -25 °C ... +60 °C / -13 °F ... +140 °F
 46 dB(A)
 0.25 W
 Transformerless
 OptiCool
 IP65
 IP65
 4K4H
 100 %

SUNCLIX
 Screw terminal

Text line

○ / ○

● / ○ / ○ / ○ / ○

CE, VDE0126-1-1, RD 1663/2000, RD 661/2007, EN 50438*,
 C10/11, PPDS, IEC 61727, UTE C15-712-1

Type designation

SMC 11000TLRP-10



SUNNY BOY 5000-US / 6000-US / 7000-US / 8000-US



ASSEMBLED IN ONTARIO
CERTIFIED TO -40° C/F



- | | | | |
|---|---|---|--|
| <p>Certified</p> <ul style="list-style-type: none"> • ETL Listed to UL 1741/IEEE 1547 and C22.2 No.107.1-01 | <p>Efficient</p> <ul style="list-style-type: none"> • 97% peak efficiency • OptiCool™ active temperature management system | <p>Safe</p> <ul style="list-style-type: none"> • Galvanic isolation | <p>Simple</p> <ul style="list-style-type: none"> • Patented automatic grid voltage detection* • Integrated DC disconnect switch |
|---|---|---|--|

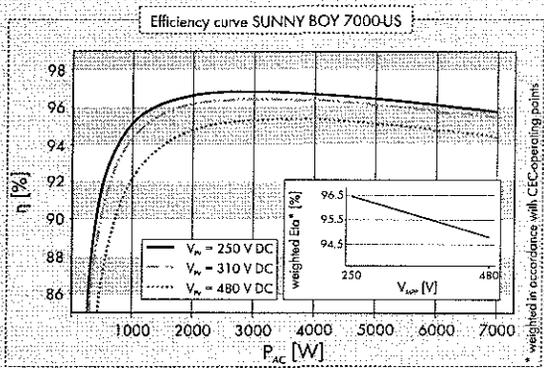
SUNNY BOY 5000-US / 6000-US / 7000-US / 8000-US

Versatile performer certified to CSA standards

The Sunny Boy 5000-US, 6000-US, 7000-US and 8000-US inverters are certified to C22.2 No. 107.1-01 and feature excellent efficiency. Graduated power classes provide flexibility in system design. Automatic grid voltage detection* and an integrated DC disconnect switch simplify installation, ensuring safety as well as saving time. These models feature galvanic isolation and can be used with all types of modules—crystalline as well as thin-film.

* US Patent US7352549B1

Technical data	Sunny Boy 5000-US			Sunny Boy 6000-US			Sunny Boy 7000-US			Sunny Boy 8000-US	
	208 VAC	240 VAC	277 VAC	208 VAC	240 VAC	277 VAC	208 VAC	240 VAC	277 VAC	240 VAC	277 VAC
Input (DC)											
Max. recommended PV power (@ module STC)	6250 W			7500 W			8750 W			10000 W	
Max. DC power (@ $\cos \phi = 1$)	5300 W			6350 W			7400 W			8600 W	
Max. DC voltage	600 V			600 V			600 V			600 V	
DC nominal voltage	310 V			310 V			310 V			345 V	
MPP voltage range	250 V - 480 V			250 V - 480 V			250 V - 480 V			300 V - 480 V	
Min. DC voltage / start voltage	250 V / 300 V			250 V / 300 V			250 V / 300 V			300 V / 385 V	
Max. input current / per string (at DC disconnect)	21 A / 20 A			25 A / 20 A			30 A / 20 A			30 A / 20 A	
	36 A @ combined terminal			36 A @ combined terminal			36 A @ combined terminal			36 A @ combined terminal	
Number of MPP trackers / fused strings per MPP tracker	1 / 4 (DC disconnect)										
Output (AC)											
AC nominal power	5000 W			6000 W			7000 W			7680 W 8000 W	
Max. AC apparent power	5000 VA			6000 VA			7000 VA			8000 VA	
Nominal AC voltage / adjustable	208 V / ● 240 V / ● 277 V / ●			208 V / ● 240 V / ● 277 V / ●			208 V / ● 240 V / ● 277 V / ●			240 V / ● 277 V / ●	
AC voltage range	183 - 229 V 211 - 264 V 244 - 305 V			183 - 229 V 211 - 264 V 244 - 305 V			183 - 229 V 211 - 264 V 244 - 305 V			211 - 264 V 244 - 305 V	
AC grid frequency; range	60 Hz; 59.3 - 60.5 Hz			60 Hz; 59.3 - 60.5 Hz			60 Hz; 59.3 - 60.5 Hz			60 Hz; 59.3 - 60.5 Hz	
Max. output current	24 A 21 A 18 A			29 A 25 A 22 A			34 A 29 A 25 A			32 A	
Power factor ($\cos \phi$)	1			1			1			1	
Phase conductors / connection phases	1/2 1/2 1/1			1/2 1/2 1/1			1/2 1/2 1/1			1/2 1/1	
Harmonics	< 4%			< 4%			< 4%			< 4%	
Efficiency											
Max. efficiency	96.7%	96.8%	96.8%	96.9%	96.8%	97.0%	97.1%	96.9%	97.0%	96.3%	96.5%
CEC efficiency	95.5%	95.5%	95.5%	95.5%	95.5%	96.0%	95.5%	96.0%	96.0%	96.0%	96.0%
Protection devices											
DC reverse-polarity protection	●			●			●			●	
AC short circuit protection	●			●			●			●	
Galvanically isolated / all-pole sensitive monitoring unit	●/-			●/-			●/-			●/-	
Protection class / overvoltage category	I/III			I/III			I/III			I/III	
General data											
Dimensions (W / H / D) in mm (in)				470 / 615 / 240 (18.5 / 24 / 9)							
DC Disconnect dimensions (W / H / D) in mm (in)				187 / 297 / 190 (7 / 12 / 7.5)							
Packing dimensions (W / H / D) in mm (in)				390 / 580 / 800 (16 / 23 / 31.5)							
DC Disconnect packing dimensions (W / H / D) in mm (in)				370 / 240 / 280 (15 / 9 / 11)							
Weight / DC Disconnect weight				64 kg (141 lb) / 3.5 kg (8 lb)						66 kg (145 lb) / 3.5 kg (8 lb)	
Packing weight / DC Disconnect packing weight				67 kg (147 lb) / 4 kg (9 lb)						69 kg (152 lb) / 4 kg (9 lb)	
Operating temperature range (full power)	-40 °C ... +45 °C (-40 °F ... +113 °F)										
Noise emission (typical)	44 dB(A)			45 dB(A)			46 dB(A)			49 dB(A)	
Internal consumption at night	0.1 W			0.1 W			0.1 W			0.1 W	
Topology	LF transformer			LF transformer			LF transformer			LF transformer	
Cooling concept	OptiCool			OptiCool			OptiCool			OptiCool	
Electronics protection rating / connection area	NEMA 3R / NEMA 3R			NEMA 3R / NEMA 3R			NEMA 3R / NEMA 3R			NEMA 3R / NEMA 3R	
Features											
Display: text line / graphic	●/-			●/-			●/-			●/-	
Interfaces: RS485 / Bluetooth®	○/○			○/○			○/○			○/○	
Warranty: 10 / 15 / 20 years	●/○/○			●/○/○			●/○/○			●/○/○	
Certificates and permits (more available on request)	UL1741, IEEE 1547, FCC Part 15 (Class A & B), CSA C22.2 No.107.1-01										
NOTE: US inverters ship with gray lids. Data at nominal conditions.											
● Standard features ○ Optional features - Not available											
Type designation	SB 5000US-11			SB 6000US-11			SB 7000US-11			SB 8000US-11	



Accessories

- RS485 interface 485USPB-SMC-NR
- Bluetooth Piggy Back BTBPINVNR
- Combi-Switch DC disconnect and PV array combiner box COMBO-SWITCH
- Combiner Box Simplify wiring for added convenience and safety SBCB-6-3R or SBCB-6-4

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