Landmarks Certificate of Appropriateness & Overlay District Permit

Louisville Metro Planning & Design Services

Case No.: 17CA1179 Intake Staff: NH

Date: 7/28/17 Fee: 0

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Instructions:

For detailed definitions of *Certificate of Appropriateness* and *Overlay District Permit*, please see page 4 of this application. Applications for *Signage* are no longer submitted to Planning & Design Services. Applications for Signage are to be made directly to the Construction Review Division.

Project Information:

Certificate of Appropriateness: ☐ Butchertown ☒ Clifton ☐ Cherokee Triangle ☐ Individual Landmark ☐ Limerick ☐ Old Louisville ☐ Parkland Business ☐ West Main Street

Overlay Permit: ☐ Bardstown/Baxter Ave Overlay (BRO) ☐ Downtown Development Review Overlay (DDRO) ☐ Nulu Review Overlay District (NROD)

Project Name: Solar Installation

Project Address / Parcel ID: 126 N Jane St. / 069G00710000

Deed Book(s) / Page Numbers[2]: _____

Total Acres: 0.24570

Project Cost: $11,900 PVA Assessed Value: $170,000

Existing Square Feet: _____ New Construction Square Feet: ____ Height (ft.): _____ Stories: _____

Project Description (*use additional sheets if needed*):

Solar panels will be installed on the south-facing side roof. The installation will be comprised of 14 280-watt panels installed in two 7-panel strings, arranged symmetrically. The attached diagram shows the proposed layout of the panels and the underlying supporting structure. Building and electrical permits are being obtained. There will be no alterations to the existing structure and there is little visibility from the street view.

Axitec panels, made in Germany
SMA Inverter, made in Germany

Contact Information:

Owner: ☐ *Check if primary contact*

Name: Jan Weber
Company:
Address: 126 N Jane St
City: Louisville State: KY Zip: 4020
Primary Phone: 502 721 9713
Alternate Phone:
Email: kyjweber@gmail.com

Applicant: ☒ *Check if primary contact*

Name: Nancy Givens
Company: Avery and Sun Solar
Address: 3015 Brownsboro Rd, #11
City: Louisville State: KY Zip: 40206
Primary Phone: 270-792-0727
Alternate Phone:
Email: nlgbg15@outlook.com

Owner Signature (required): Janice L. Weber

Attorney: ☐ *Check if primary contact*

Name: N/A
Company:
Address:
City: State: Zip:
Primary Phone:
Alternate Phone:
Email:

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Plan prepared by: ☐ *Check if primary contact*

Name: Samuel Avery
Company: Avery and Sun Solar
Address: 795 Port Wooden Rd
City: Upton State: KY Zip: 42784
Primary Phone: 502 741 6944
Alternate Phone:
Email: samuelavery@gmail.com

Certification Statement: A certification statement **must be submitted** with any application in which the owner(s) of the subject property is (are) a limited liability company, corporation, partnership, association, trustee, etc., or if someone other than the owner(s) of record sign(s) the application.

I, _____, in my capacity as _____, hereby
representative/authorized agent/other

certify that _____ is (are) the owner(s) of the property which
name of LLC / corporation / partnership / association / etc.

is the subject of this application and that I am authorized to sign this application on behalf of the owner(s).

Signature: _____ Date: _____

I understand that knowingly providing false information on this application may result in any action taken hereon being declared null and void. I further understand that pursuant to KRS 523.010, et seq. knowingly making a material false statement, or otherwise providing false

17 COA 1179

Please submit the completed application along with the following items:

Project information

- ☐ Land Development Report[1]
- ☐ Current photographs showing building front, specific project area, and surrounding buildings
- ☐ Pictures, samples, brochures, or other technical data describing materials, such as windows, doors, roofing, fencing, etc. to be used in the renovation or replacement
- ☒ One map of the project area and surrounding properties (may be obtained from http://www.lojic.org/ using the *LOJIC Online Map*)

Site plan (*see site plan example on next page*)

- ☐ Two sets of site plans *drawn to scale* with dimensions, as applies to the project, indicating property lines, structures, landscaping, fencing, and parking
- ☐ Two copies of floor plans *drawn to scale* with dimensions and each room labeled
- ☐ Two copies of elevation drawings (a drawing showing exterior walls) *drawn to scale* with dimensions. For fencing, only photos/drawings of the proposed fence are required.

Committee Review Only

Committee reviews may be required due to the complexity of the case. The necessity of these items will be determined by staff upon review. Projects requiring committee level review include construction of new buildings, demolition, and projects that vary widely from design guidelines.

- ☐ Two sets of 11"x17" format site plans drawn to scale with dimensions
- ☐ Two sets of 11"x17" elevation drawings to scale with dimensions
- ☐ Two sets of 11"x17" landscaping drawings to scale with dimensions
- ☐ One set of mailing label sheets for: 1st tier Adjoining Property Owners (APOs)[3], owners, applicants, contacts, and Case Manager. Applicant is responsible for mailing.
- ☐ One copy of the mailing label sheets

Resources:

1. Detailed instructions to obtain a Land Development Report are available online at: http://ags2.lojic.org/lojiconline/
2. Deeds and plats can be found at the Jefferson County Clerk's Office, located at the 2nd floor of Metro Hall (527 West Jefferson Street, telephone: 502-574-6220). Many deeds, plats and other records are available online at: http://www.landrecords.jcc.ky.gov/records/S0Search.html
3. Adjoining property ownership information can be found at the Property Valuation Administrator (PVA) office at 531 Court Place, Suite 504 or via their website: https://jeffersonpva.ky.gov/
4. View agency comments at: http://portal.louisvilleky.gov/codesandregs/mainsearch. Enter your case number in the 'Permit/Case/Docket Number' search bar and then select your case under the 'Application Number' tab.

Land Development Report

July 28, 2017 3:29 PM

About LDC

Location

Parcel ID:	069G00710000
Parcel LRSN:	50889
Address:	126 N JANE ST

Zoning

Zoning:	R5
Form District:	TRADITIONAL NEIGHBORHOOD
Plan Certain #:	NONE
Proposed Subdivision Name:	NONE
Proposed Subdivision Docket #:	NONE
Current Subdivision Name:	NONE
Plat Book - Page:	NONE
Related Cases:	NONE

Special Review Districts

Overlay District:	NO
Historic Preservation District:	CLIFTON
National Register District:	CLIFTON
Urban Renewal:	NO
Enterprise Zone:	NO
System Development District:	NO
Historic Site:	YES

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Environmental Constraints

Flood Prone Area

FEMA Floodplain Review Zone:	NO
FEMA Floodway Review Zone:	NO
Floodplain Ordinance Review Zone:	NO
Conveyance Zone Review Zone:	NO
FEMA FIRM Panel:	21111C0027E

Protected Waterways

Potential Wetland (Hydric Soil):	NO
Streams (Approximate):	NO
Surface Water (Approximate):	NO

Slopes & Soils

Potential Steep Slope:	NO
Unstable Soil:	NO

Geology

Karst Terrain:	YES

Sewer & Drainage

MSD Property Service Connection:	YES
Sewer Recapture Fee Area:	NO
Drainage Credit Program:	CSO132 - Project(s) Value between $.04 - $1.5

Services

Municipality:	LOUISVILLE
Council District:	9
Fire Protection District:	LOUISVILLE #2
Urban Service District:	YES

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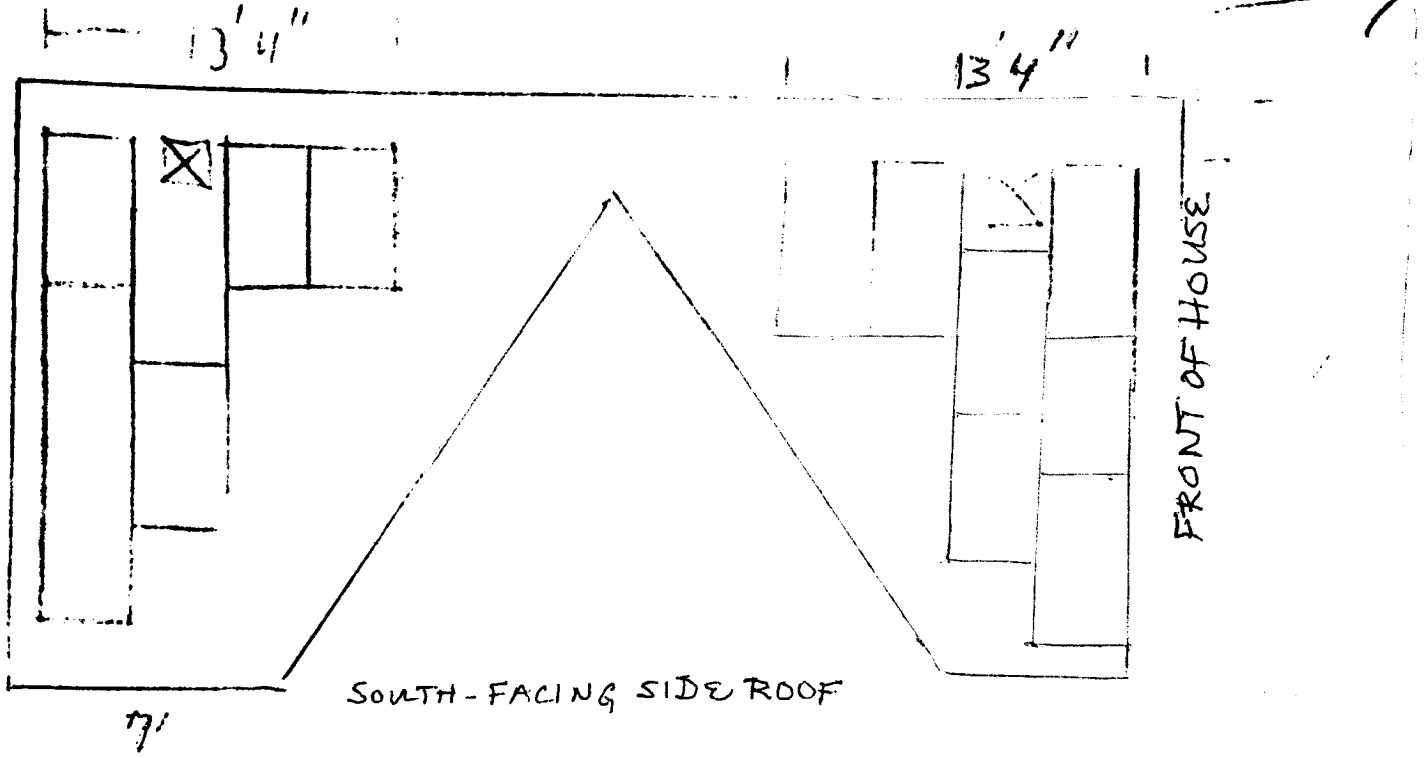
Owner:
Jan Weber
126 N. Jane St
Louisville KY 40216
502 721 [illegible]

Proposed Solar Installation

July 23, 2017

Installer: Dan Avery
Avery and Son
averyandsun@gmail.com
502-741-6944

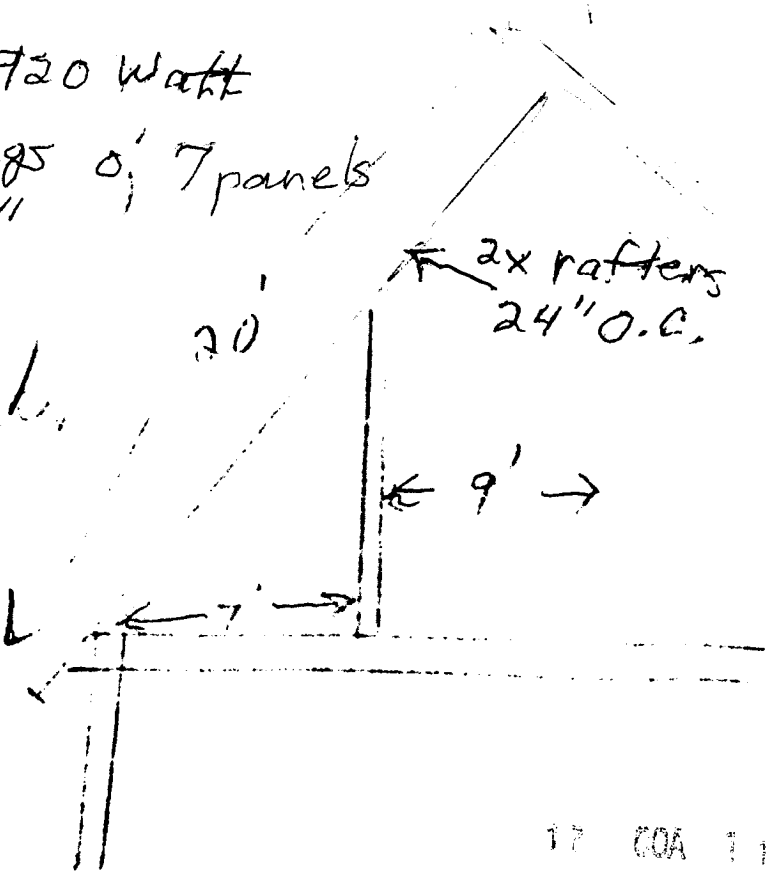
Street



14 x 280 watt panels = 3920 Watt

5 kW [illegible] → 2 strings of 7 panels
Panels are 5½' x 40"

100 amp [illegible]
20 amp 240 Volt breaker



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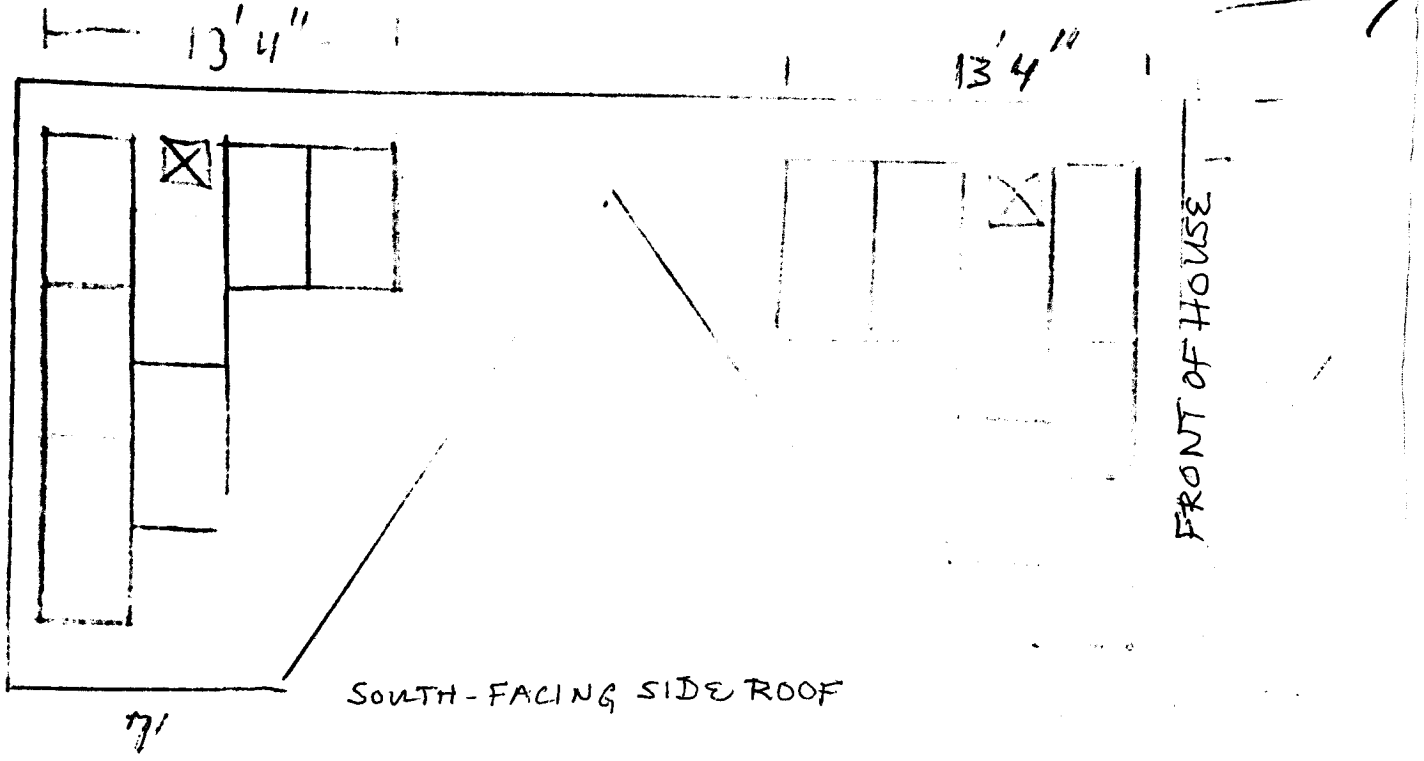
Owner:
Jan Weber
126 N. Jane St
Louisville KY 40206
502 721 9713

Proposed Solar Installation

July 23, 2017

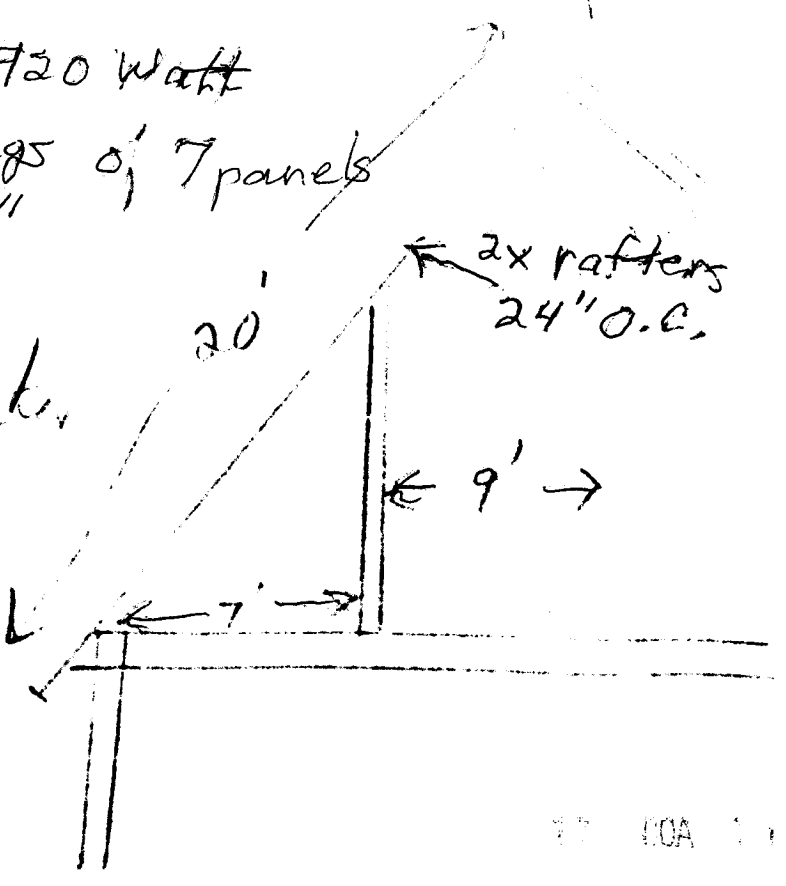
Installer: Dani Avery
Avery and Son
averyandsun@gmail.com
502-741-6944

Street



14 x 280w panels = 3920 Watt
SMA 3800 → 2 strings of 7 panels
Panels are 5½' x 40"

100 amp service
20 amp 240Vac breaker



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LOJIC Online
A GIS Partnership to Meet the Growing Needs of Louisville, KY
126 N Jane St
Gray
Basic
Aerial
Base
Labels
N JANE ST
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LOJIC © 2017
1:300

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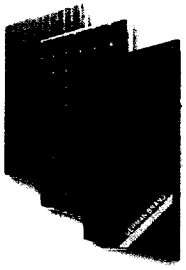

AC-270M/156-60S
AC-275M/156-60S
AC-280M/156-60S
AC-285M/156-60S
AC-290M/156-60S

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AXITEC®
high quality german solar brand

AXIpremium

60 cell monocrystalline
High performance photovoltaic module

German engineered – made for America

- 12 years manufacturer's warranty
  Two more years than industry standard
- Highest performance due to specifically selected technologies and materials
- Positive power tolerance from 0-5 Wp
  Higher guaranteed yield
- Snow load of up to 113 psf
  Stable module for a long life in extreme conditions
- 100 % electroluminescence inspection
  Micro crack and hotspot free modules
- Axitec-Soft-Grip-Seam aluminum frame
  Higher stability and easier handling
- High quality junction box and connector system for a longer life time

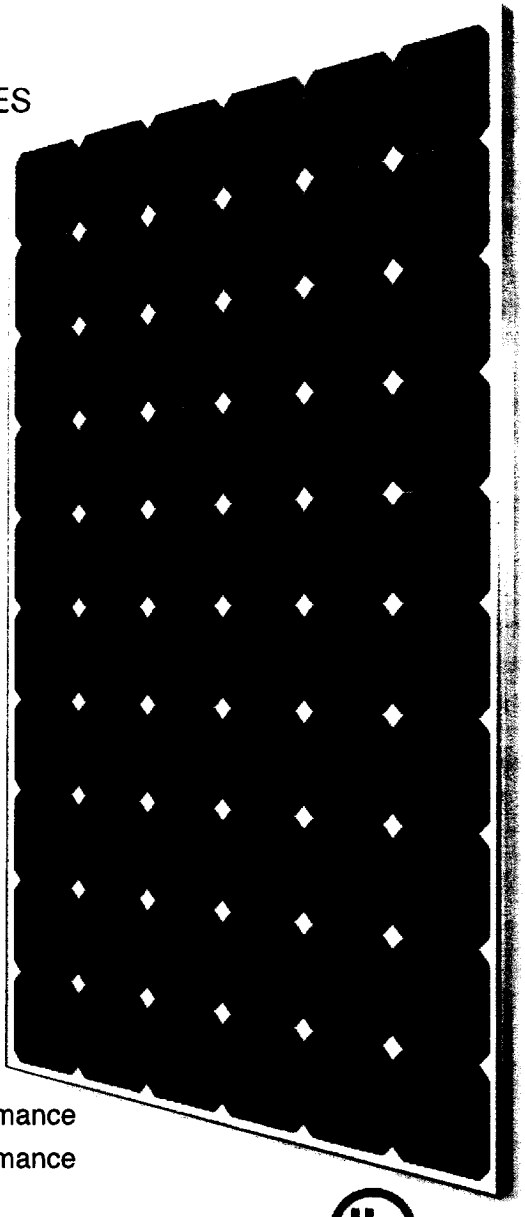
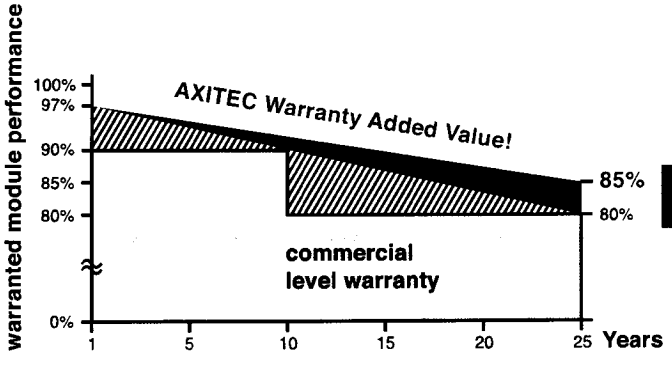


Fig. similar 60M156USA170727A

Exclusive linear AXITEC high performance guarantee!

- 15 years manufacturer's guarantee on 90 % of the nominal performance
- 25 years manufacturer's guarantee on 85 % of the nominal performance



1 - 8 % more power after 25 years

c UL us LISTED

c ETL us Intertek

Module Fire Performance:
TYPE 1 (UL 1703)
CLASS C (IEC61730)

AXIpremium

AC-270M/156-60S
AC-275M/156-60S
AC-280M/156-60S
AC-285M/156-60S
AC-290M/156-60S

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AXITEC®
high quality german solar brand

Distributed by:

Electrical data (at standard conditions (STC) irradiance 1000 watt/m², spectrum AM 1.5 at a cell temperature of 25°C)

Type	Nominal output Pmpp	Nominal voltage Umpp	Nominal current Impp	Short circuit current Isc	Open circuit voltage Uoc	Module conversion efficiency
AC-270M/156-60S	270 Wp	30.94 V	8.80 A	9.41 A	39.26 V	16.60 %
AC-275M/156-60S	275 Wp	31.20 V	8.86 A	9.50 A	39.32 V	16.90 %
AC-280M/156-60S	280 Wp	31.50 V	8.95 A	9.55 A	39.45 V	17.21 %
AC-285M/156-60S	285 Wp	31.59 V	9.09 A	9.68 A	39.56 V	17.52 %
AC-290M/156-60S	290 Wp	31.71 V	9.16 A	9.70 A	39.70 V	17.83 %

Design

Frontside	0.13 inch (3.2 mm) hardened, low-reflection white glass
Cells	60 monocrystalline high efficiency cells 6 inch (156 x 156 mm)
Backside	Composite film
Frame	1.38 inch (35 mm) silver anodized aluminium frame

Mechanical data

L x W x H	64.57 x 39.06 x 1.38 inch (1640 x 992 x 35 mm)
Weight	39.68 lbs (18.0 kg) with frame

Power connection

Socket	Protection Class IP67 (3 bypass diodes)
Wire	43.3 inch, AWG 11
Plug-in system	Plug/socket IP67

Limit values

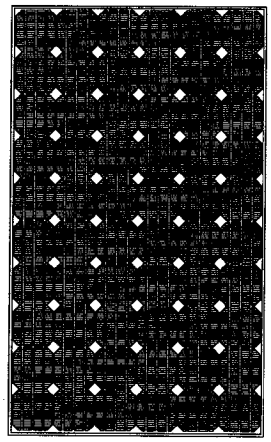
System voltage	1000 VDC (UL) 1000 VDC (IEC)
NOCT (nominal operating cell temperature)*	45°C +/-2K
Max. load-carrying capacity	113 PSF
Reverse current feed IR	15.0 A
Permissible operating temperature	-40°C to 85°C / -40F to 185F

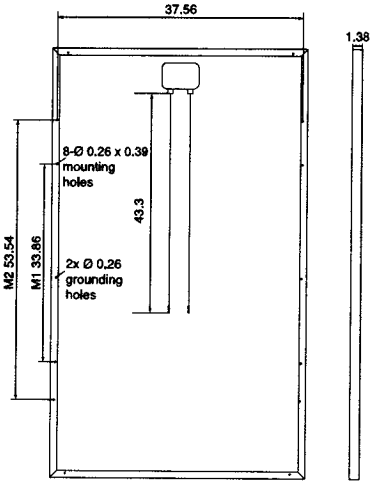
(No external voltages greater than Vo may be applied to the module)

* NOCT, irradiance 800 W/m²; AM 1.5; wind speed 1 m/s; Temperature 20°C

Temperature coefficients

Voltage Uoc	-0.30 %/K
Current Isc	0.04 %/K
Output Pmpp	-0.40 %/K





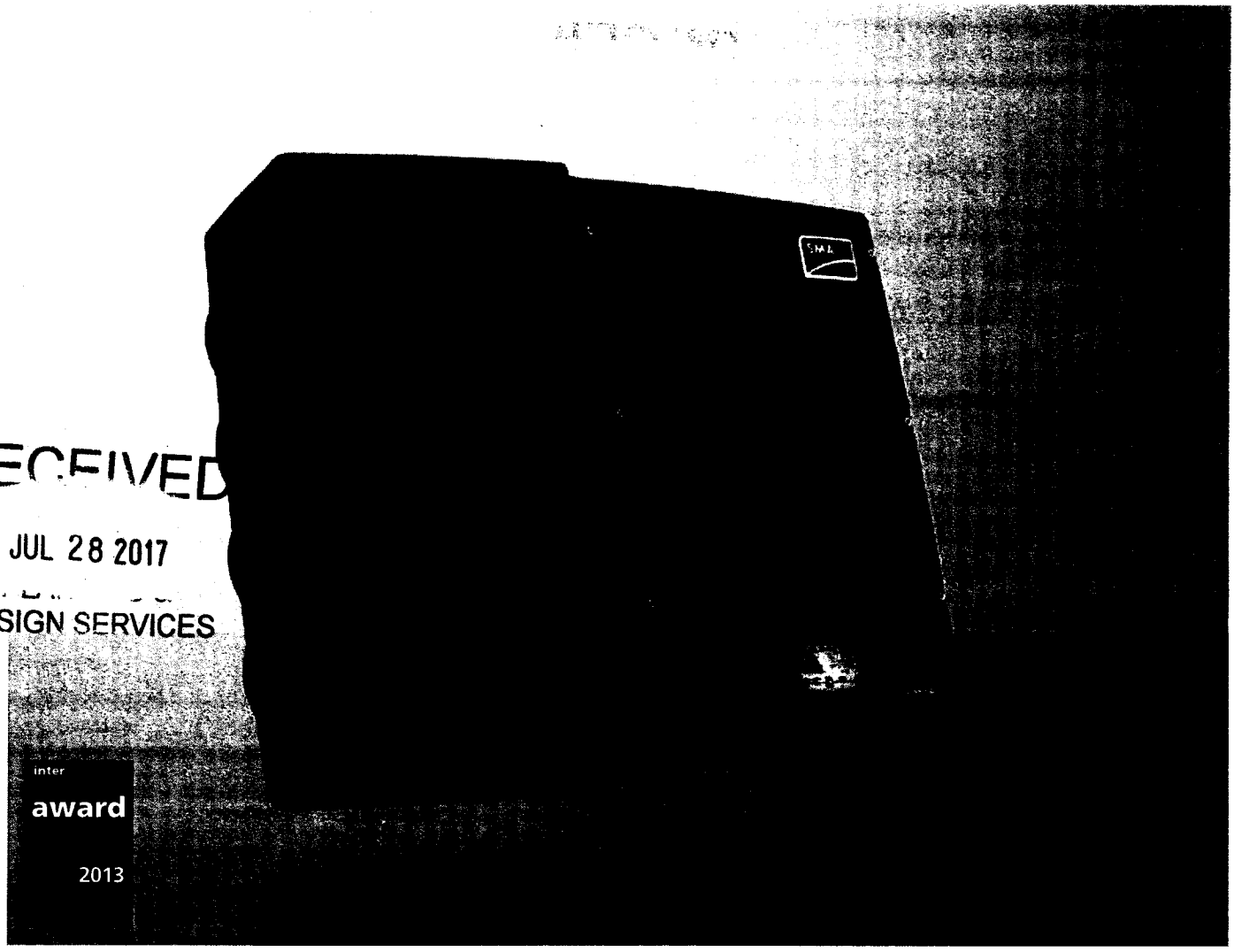
All dimensions in inch

Low-light performance (Example for AC-280M/156-60S)

I-U characteristic curve	Current Ipp	Voltage Upp
200 W/m²	2.06 A	29.55 V
400 W/m²	3.55 A	30.56 V
600 W/m²	5.08 A	31.15 V
800 W/m²	7.25 A	31.44 V
1000 W/m²	8.95 A	31.50 V

Packaging

Module pieces per pallet	30
Module pieces per HC-container	840



Easy to Use

- Installed like a PV inverter
- All-in-one enclosure
- No battery sizing required

Efficient

- Optimal, effective year-round battery capacity of 2 kWh
- Maximized self-consumption through efficient charge and load management

Safe

- VDE-certified lithium-ion battery and inverter
- Battery partner LG Chem is the global leader

Communicative

- Integrated Webconnect function communicates with Sunny Portal via Ethernet
- Multifunction relay for easy load management
- Easily and flexibly combined with SMA Smart Home components

SUNNY BOY 3600 / 5000 SMART ENERGY

The perfect combination of PV inverter and battery

It comes with everything. The new Sunny Boy Smart Energy the easiest solution for typical residential PV applications. This combination of a modern PV inverter and a battery with an effective capacity of 2 kWh not only optimizes energy consumption but also makes it possible to use home-generated solar energy around the clock. The Sunny Boy Smart Energy is the first wall-mountable, series-produced PV inverter to feature an integrated lithium-ion battery, making it perfect for use in the SMA Smart Home. Additionally, the integrated Webconnect function provides worldwide access to consumption and yield data via Sunny Portal.

Technical Data	Sunny Boy 3600 Smart Energy	Sunny Boy 5000 Smart Energy
Input (DC)		
Max. DC power (at cos φ = 1)	5200 W	6600 W
Max. input voltage	750 V	750 V
MPP voltage range / rated input voltage	175 V to 500 V / 350 V	175 V to 500 V / 350 V
Min. input voltage / initial input voltage	125 V / 150 V DC	125 V / 150 V DC
Max. input current input A / input B	15 A / 15 A	15 A / 15 A
Max. input current per string input A / input B	15 A / 15 A	15 A / 15 A
Number of independent MPP inputs / strings per MPP input	2 / A:2; B:2	2 / A:2; B:2
Output (AC)		
Rated power (at 230 V, 50 Hz)	3680 W	4600 W
Max. AC apparent power	3680 VA	5000 VA*
Nominal AC voltage / range	220 V, 230 V, 240 V / 180 V to 280 V	220 V, 230 V, 240 V / 180 V to 280 V
AC power frequency / range	50 Hz, 60 Hz / ± 5 Hz	50 Hz, 60 Hz / ± 5 Hz
Rated power frequency / rated grid voltage	50 Hz / 230 V	50 Hz / 230 V
Max. output current	16 A	22 A
Power factor at rated power	1	1
Adjustable displacement power factor	0.8 lagging to 0.8 leading	0.8 lagging to 0.8 leading
Feed-in phases / connection phases	1 / 1	1 / 1
Efficiency		
Max. efficiency / European efficiency	97.1% / 96.5%	97.1% / 96.7%
Max. battery charging / battery discharging efficiency	97% / 97%	97% / 97%
Max. battery efficiency	98%	98%
Battery		
Manufacturer	LG Chem	LG Chem
Type	BAT-2.0-A-SE-10	BAT-2.0-A-SE-10
Technology	Li-Ion	Li-Ion
Continuous power / max. power	1.5 kW / 2kW	1.5 kW / 2kW
Nominal capacity / usable capacity	2 kWh / 2 kWh	2 kWh / 2 kWh
Rated battery voltage	150 V	150 V
Max. charge / discharge current	12.5 A	12.5 A
Calendar service life during cycle operation	> 10 years	> 10 years
Cycle service life	≥ 4100 at 100% DoD	≥ 4100 at 100% DoD
Protective devices		
Input-side disconnection point	●	●
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
Integrated battery fuse	35 A	35 A
General data		
Dimensions (W / H / D)	877 mm / 711 mm / 252 mm (34.5 inch / 28 inch / 9.9 inch)	
Weight of inverter / battery	30 kg (66.1 lb) / 27.5 kg (60.6 lb)	
Operating temperature range in battery operation	0 °C to +40 °C (+32 °F to +104 °F)	
Noise emission (typical)	≤ 25 dB(A)	≤ 25 dB(A)
Self-consumption (at night)	< 0.5 W	< 0.5 W
Battery system connection	DC connection	DC connection
Topology	transformerless	transformerless
Cooling method	convection	convection
Degree of protection (according to IEC 60529) inverter / battery section	IP54 / IP21	IP54 / IP21
Climatic category (according to IEC 60721-3-4)	3K5	3K5
Maximum permissible value for relative humidity (non-condensing)	95%	95%
Features		
DC connection / AC connection	SUNCLIX / spring-cage terminal	SUNCLIX / spring-cage terminal
Display	Graphic	Graphic
Interface: Speedwire / Webconnect	●	●
Inverter warranty: 5 / 10 / 15 / 20 years	● / ○ / ○ / ○ / ○	● / ○ / ○ / ○ / ○
Battery warranty 5 / 7*** years	● / ○	● / ○
Certificates and approvals (others available upon request)	CE, DIN EN 62109-1 / IEC 62109-1, VDE 0126-1-1, VDE AR-N 4105, VDE-ST-Li-ESS-001:2013/03, CEI0-21, G59/3	CE, DIN EN 62109-1 / IEC 62109-1, VDE 0126-1-1, VDE AR-N 4105, VDE-ST-Li-ESS-001:2013/03, CEI0-21, G59/3, G83/2
Certificates and approvals (planned)	AS 3100, AS 4777, C10/11, EN 50438**, IEC 62109-2 PPC, NEN 50438, PPDS, RD 1699, VFR 2014	

Technical data is subject to change; last update 2014-09-16

● Standard feature ○ Optional feature – Not available

Data at nominal conditions

* 4600 VA according to VDE-AR-N 4105

** Does not apply to all national appendices of EN 50438

*** Available via extended warranty

Type designation	SB 3600SE-10	SB 5000SE-10