

HISTORIC AND DESIGN REVIEW COMMISSION

November 16, 2016

Agenda Item No: 11

HDRC CASE NO: 2016-436
ADDRESS: 126 E LULLWOOD AVE
LEGAL DESCRIPTION: NCB 6534 BLK 14 LOT 60, 61 & 62
ZONING: R-5 H
CITY COUNCIL DIST.: 1
DISTRICT: Monte Vista Historic District
APPLICANT: Daniel Moyer/CAM Solar
OWNER: Roger Chiodo
TYPE OF WORK: Installation of Solar Panels
REQUEST:

The applicant is requesting a Certificate of Appropriateness for approval to install 18 solar panels on four rear slopes of the roof.

APPLICABLE CITATIONS:

Historic Design Guidelines, Chapter 3, Guidelines for Additions

6. Designing for Energy Efficiency

C. SOLAR COLLECTORS

i. Location—Locate solar collectors on side or rear roof pitch of the primary historic structure to the maximum extent feasible to minimize visibility from the public right-of-way while maximizing solar access. Alternatively, locate solar collectors on a garage or outbuilding or consider a ground-mount system where solar access to the primary structure is limited.

ii. Mounting (sloped roof surfaces)—Mount solar collectors flush with the surface of a sloped roof. Select collectors that are similar in color to the roof surface to reduce visibility.

FINDINGS:

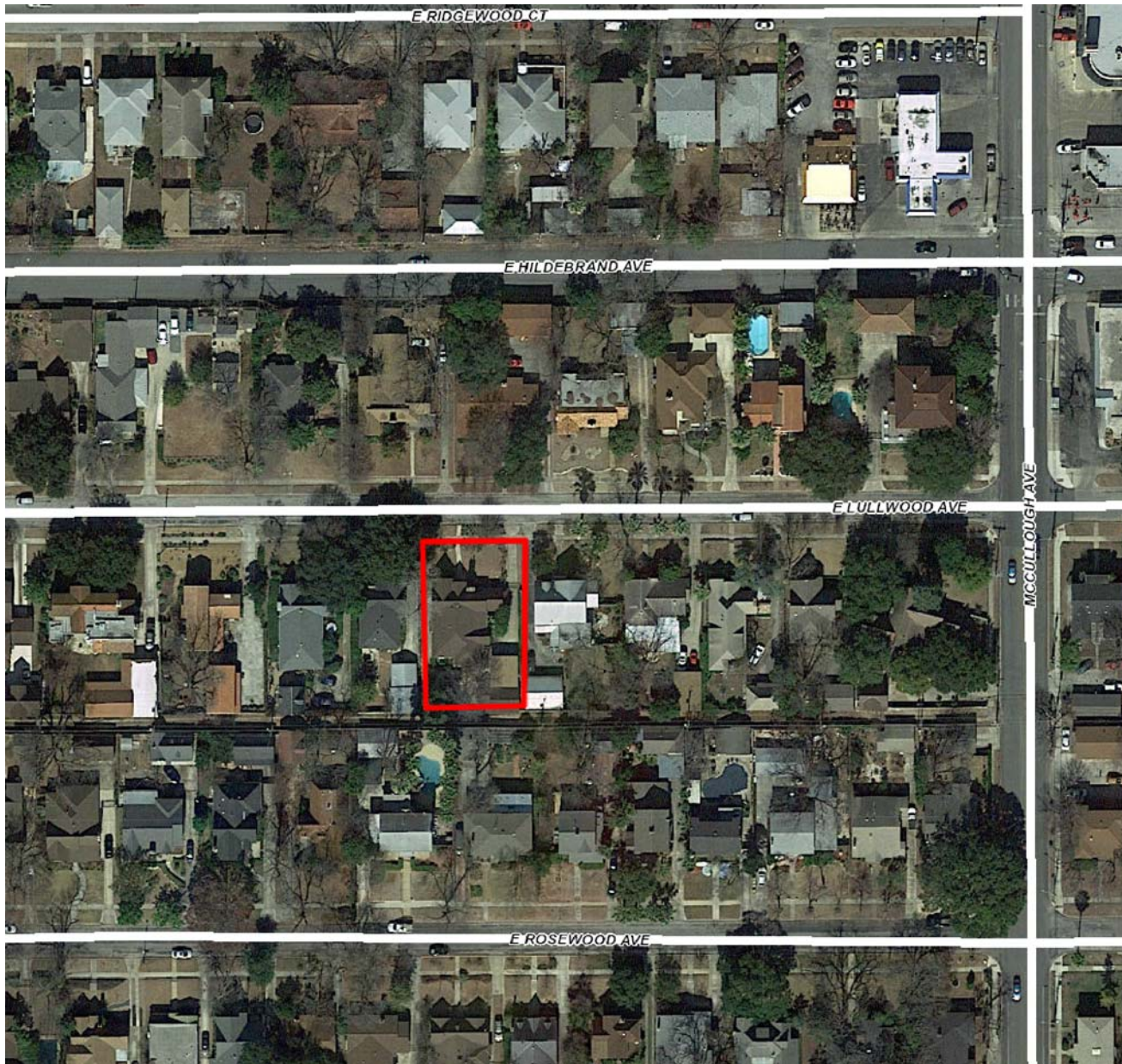
- a. The home is a Tudor style home in the Monte Vista Historic District, which was designated in 1975.
- b. The structure at 126 E Lullwood has a cross-gabled roof form with two front gables, with a rear hipped roof. The front and side gables are steep in pitch. The applicant is proposing to install 18 total solar panels on composition shingles roof of the primary structure. The applicant is proposing to install 2 panels on the rear slope of the side gable, 5 panels on the left shed roof behind the side gable, 9 panels on the left slope of the rear hipped roof and 2 panels on the right slope of the rear hipped roof. According to the Guidelines for Additions 6.C., installations should be in locations that minimize visibility from the public right-of-way.
- c. Staff visited the site on November 9, 2016. The home is located midblock and in the interior of the historic district. The pitch of the side gable is steep and the proposed location of the panels would not be visible from the public right-of-way.
- d. The applicant is proposing to mount the 18 panels flush with the pitched roof. According to the Guidelines for Additions 6.C.ii, solar collectors should be flush with the roof surface. Staff finds the proposal consistent with the guidelines.

RECOMMENDATION:

Staff recommends approval as submitted based on findings a through d.

CASE MANAGER:

Lauren Sage



Flex Viewer

Powered by ArcGIS Server

Printed: Nov 08, 2016

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CITY of SAN ANTONIO
NOTICE of HEARING
HISTORIC & DESIGN
REVIEW COMMISSION

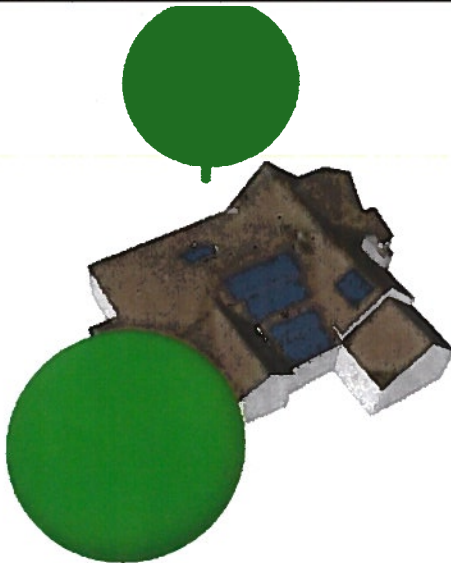
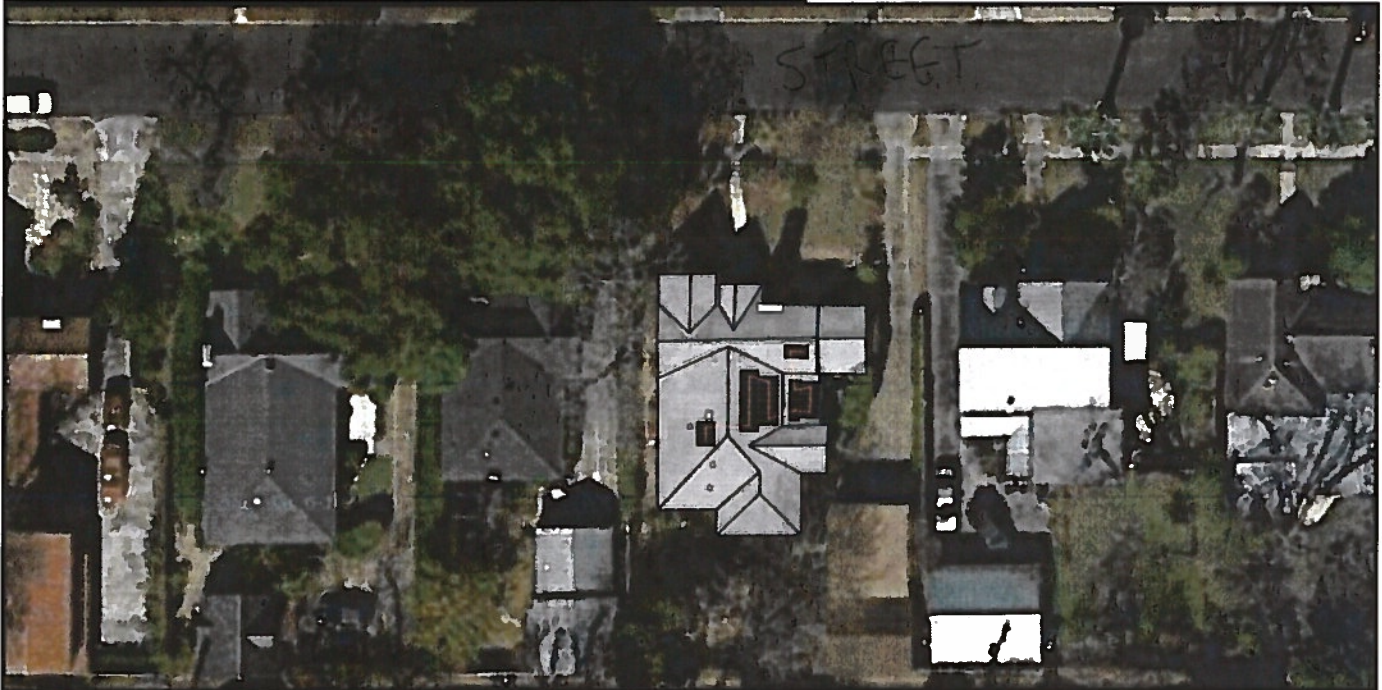
ADDRESS: 106 E. ULLMOOD
REQUEST: INSTALLATION OF SOLAR PANELS
HEARING DATE: NOV 16 2017
TIME: 8 AM

FOR MORE INFORMATION CONTACT
(210) 215-9274
ALL HDRC MEETINGS TAKE PLACE AT 1901 S. ALAMO



Customer: Roger Chiodo
Address: 126 E Lullwood Ave, San Antonio, TX 78212,
United States

System size: 4.77 kW
Designer: CAM Solar



Type	Manufacturer	Model	Quantity
Module	CanadianSolar Inc.	CS6P-265P	18
DC Optimizer	SolarEdge Technologies Inc.	P300	18
Inverter	SolarEdge Technologies Inc.	SE5000A-US (240V)	1
Service Panel	General Electric	GE 200A Max; 200A MB	1
Meter	null	Billing Meter 200A	1
Meter	null	Solar Meter CPSB 150A	1
Disconnect	General Electric	60A Unfused	1

Notes: Roof Material: CompShingle
Roof Azimuth: 90, 180, 270
Roof Pitch: 10, 52, 30

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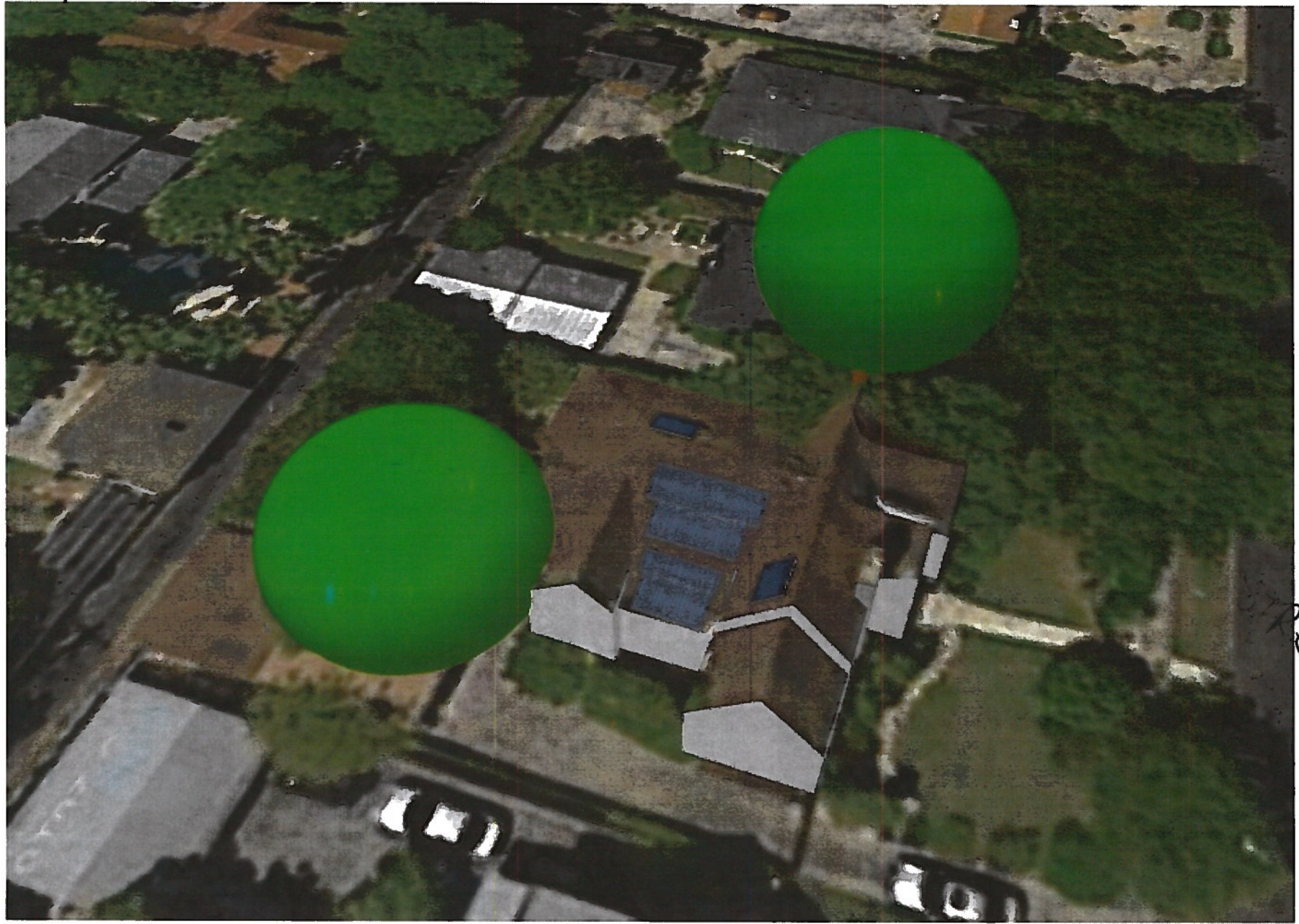
System size: 4.77 kW
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STREET



Top Elevation



RECT

FRONT Right Corner Elevation



Front left corner Elevation









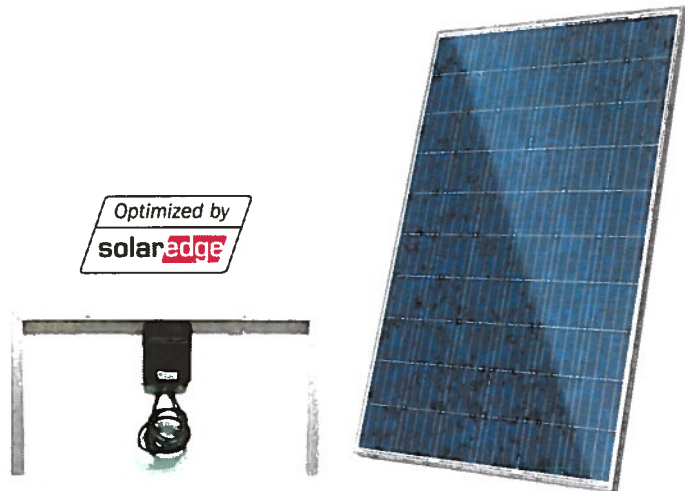




CS6P-260 | 265P-SD






Canadian Solar's SmartDC module features an innovative integration of Canadian Solar's module technology and SolarEdge's power optimization for grid-tied PV applications.

By replacing the traditional junction-box with a SolarEdge power optimizer, the SmartDC module optimizes power output at module-level. With this feature, the SmartDC module can eliminate the module-level mismatch and decrease shading losses. Furthermore, the SmartDC module provides module-level data to minimize operational costs and allow effective system management.



* Optional black frame available upon request

KEY FEATURES

- 
Harvest up to 25% more energy from each module
 - Maximizes power from each individual module against potential mismatch risk
 - Decreases shading losses
- 
Easy installation, simple system design
 - Integrated smart solution, no need to add other accessories
 - Enhances the shading tolerance
- 
Reduced BoS Costs
 - Up to 11.25 kW ~ 12.75 kW per string allows for more modules based on different inverters
- 
Free module-level monitoring system
 - Full visibility of system performance
 - Free smart phone app for the monitoring system
- 
More Safety
 - Automatic drop of DC current and voltage when inverter or grid power is shutdown

25
years

linear power output warranty

10
years

product warranty on materials and workmanship

MANAGEMENT SYSTEM CERTIFICATES*

ISO 9001:2008 / Quality management system
 ISO/TS 16949:2009 / The automotive industry quality management system
 ISO 14001:2004 / Standards for environmental management system
 OHSAS 18001:2007 / International standards for occupational health & safety

PRODUCT CERTIFICATES*

IEC 61215 / IEC 61730: VDE/CE
 UL 1703 / IEC 61215 performance: CEC listed (US)
 UL 1703: CSA



* As there are different certification requirements in different markets, please contact your local Canadian Solar sales representative for the specific certificates applicable to the products in the region in which the products are to be used.

CANADIAN SOLAR INC. is committed to providing high quality solar products, solar system solutions and services to customers around the world. As a leading manufacturer of solar modules and PV project developer with over 14 GW of premium quality modules deployed around the world since 2001, Canadian Solar Inc. (NASDAQ: CSIQ) is one of the most bankable solar companies worldwide.

CANADIAN SOLAR INC.

545 Speedvale Avenue West, Guelph, Ontario N1K 1E6, Canada, www.canadiansolar.com, support@canadiansolar.com

Rear View

Frame Cross Section

Mounting Hole

Power Optimizer connected to a SolarEdge Inverter		
CS6P	260P-SD	265P-SD
Nominal Max. Power (Pmax STC)	260 W	265 W
Nominal Max. Power (Pmax NOCT)	189 W	192 W
Open Circuit Voltage (Voc STC)	37.5 V	37.7 V
Output Voltage Range (Vout)	5-60 V	5-60 V
Max. Output Current (Imax)	15 A	15 A
Max. Series Fuse Rating	20 A	20 A
Module Efficiency	16.16 %	16.47 %
Output During Standby (power optimizer disconnected from inverter or inverter off)	1 V	

Specification	Data
Cell Type	Poly-crystalline, 6 inch
Cell Arrangement	60 (6×10)
Dimensions	1638×982×40 mm (64.5×38.7×1.57 in)
Weight	19.1 kg
Front Cover	3.2 mm tempered glass
Frame Material	Anodized aluminium alloy
J-Box	IP65
Cable	PV1-F 1*6.0 mm ² / 952 mm
Connectors	MC4
Stand. Packaging	26 pieces, 544 kg (quantity & weight per pallet)
Module Pieces per Container	728 pieces (40' HQ)

Min. String Length	EU & APAC	1 ph	8	
		3 ph	16	
	US & Canada	3 ph - MV	18	
		1 ph	8	
Max. String Length	EU & APAC	3 ph (208 V)	10	
		1 ph	20	
		3 ph	42	
	US & Canada	3 ph - MV	48	
		1 ph	19	
		3 ph (208 V)	22	
Max. Power per String (W)	EU & APAC	1 ph	5250	
		3 ph	11250	
		3 ph - MV	12750	
	US & Canada	1 ph	5250	
		3 ph (208 V)	6000	
Parallel Strings of Different Lengths			Yes	
Parallel Strings of Different Orientations			Yes	
Operating Temperature			-40°C ~ +85°C	
Max. System Voltage			1000 V (IEC) / 600 V (UL)	
Application Classification			Class A	
Fire Rating			Type 1 (UL1703) / Class C (IEC61730)	
Power Tolerance			0 ~ +5 W	

Specification	Data
Temperature Coefficient (Pmax)	-0.41 % / °C
Temperature Coefficient (Voc)	-0.31 % / °C
Temperature Coefficient (Isc)	0.053 % / °C
Nominal Operating Cell Temperature	45±2 °C

EMC	FCC Part15 Class B, IEC61000-6-2, IEC61000-6-3
PV Optimizer J-Box	EN50548, UL3730, IEC62109-1 (Class II safety), UL1741
Fire Safety	VDE-AR-E 2100-712:2013-05