

Interconnection Application For Category 1 Generators – 20 kW and Less

To submit an application to interconnect a Category 1 Generating Facility (20 kW or less, inverter-based, UL 1741 listed) please fill out this application form down to the space for your signature. Once complete, please sign and attach any documentation provided by the Generator manufacturer describing the UL 1741 listing for the Generating Facility.

1.	Generator contact information (who will be legally responsible for the Generating Facility).
	Company:N/A
	Representative:Tom SmithTitle:Homeowner
	Street Address:123 Broad Street
	Mailing Address (if different):
	E-mail Address:tomsmith@email.com
	Telephone Number:860-555-5555Fax Number:860-555-0000
	Responsible party's name and contact information in case of emergency (provide day, evening and weekend contact information:_Tom Smith, (day) 860-555-5555 (evening/weekend) 860-111-1111
	Electric Service Account Number:500000-100000
2.	Installing Electrical Contractor Information.
	Company:Sun Solar, LLC
	Representative: _John Daniels License Number:0123456-E1
	Street Address:123 Sun Street
	Mailing Address (if different):
	E-mail Address:JDSunSolar@email.com
	Telephone Number:860-555-1111Fax Number:860-555-2222
3.	Requested In Service Date:1/1/2023

4.	Generating Facility / Inverter Information
	Manufacturer: _Solar Products Inc
	Model No123456Version No1Serial No112233
	Generating Facility Type: Single PhaseXThree Phase SynchronousInductionDCOther
	Nameplate AC Rating:5.0kW orkVA
	Generating Facility / Inverter AC output voltage:240Volts
	Rated Current:30_Amps
	Prime Mover: Photovoltaic _xReciprocating EngineFuel CellTurbineOther
	Energy Source: Solar_xWindHydoDieselNatural GasFuel OilOther
	UL 1741 Listed? YesxNo
	System cost (pre-tax)\$30,000 Provide Single Line Diagram of Interconnection and Site Plan (attach)
5.	Liability Insurance: Send us your certificate of liability insurance.
	Carrier:Insurance Company
	Limits:\$500,000
	Agent Name & Address:Mary Jones, 123 Main Street, Norwich, CT 06360
6.	Other Comments, Specifications and Exceptions (attach additional pages if required):
_	
7.	Generator Signature (Attach manufacturer's certification of UL 1741 compliance and sign here)
	I hereby certify that, to the best of my knowledge, all of the information provided in this application is true and correct, and I agree to the Terms and Conditions as described within the Interconnection Agreement attached hereto.
	Generator Signature:Tow SmithDate:1/1/22





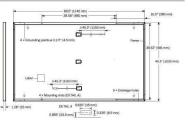


Engineered in Germany



MECHANICAL SPECIFICATION

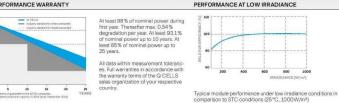
Format	68.5 × 40.6 × 1.26 in (including frame) (1740 × 1030 × 32 mm)
Weight	43.9lbs (19.9kg)
Front Cover	0.13 in (3.2 mm) thermally pre-stressed glass with anti-reflection technology
Back Cover	Composite film
Frame	Black anodized aluminum
Cell	6 × 20 monocrystalline Q.ANTUM solar half cells
Junction Box	2.09-3.98 × 1.26-2.36 × 0.59-0.71 in (53-101 × 32-60 × 15-18 mm), Protection class IP67, with bypass diodes
Cable	4mm² Solar cable; (+) ≥45.3 in (1150mm), (-) ≥45.3 in (1150mm)
Connector	Stäubli MC4, Hanwha Q CELLS HQC4, Amphenol UTX, Renhe 05-6, Tongling TL-Cable01S, JMTHY JM601; IP68 or Friends PV2e; IP67

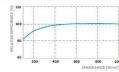


ELECTRICAL CHARACTERISTICS

PO	WER CLASS			330	335	340	345
MIN	IIMUM PERFORMANCE AT STANDA	RD TEST CONDITIC	NS, STC1 (POWE	R TOLERANCE +5 W / -0	W)		
	Power at MPP ¹	P _{MPP}	[W]	330	335	340	345
_	Short Circuit Current ¹	I _{sc}	[A]	10.41	10.47	10.52	10.58
unu	Open Circuit Voltage ¹	Voc	[V]	40.15	40.41	40.66	40.92
Minin	Current at MPP	Inter	[A]	9.91	9.97	10.02	10.07
2	Voltage at MPP	V _{MPP}	[V]	33.29	33.62	33.94	34.25
	Efficiency ¹	η	[%]	≥18.4	≥18.7	≥19.0	≥19.3
MIN	IIMUM PERFORMANCE AT NORMA	L OPERATING CONI	DITIONS, NMOT				
	Power at MPP	P _{MPP}	[W]	247.0	250.7	254.5	258.2
E	Short Circuit Current	I _{sc}	[A]	8.39	8,43	8.48	8.52
imit	Open Circuit Voltage	Vac	[V]	37.86	38.10	38.34	38.59
Ē	Current at MPP	I _{MPP}	[A]	7.80	7.84	7.89	7.93
	Voltage at MPP	V _{MPP}	[V]	31.66	31.97	32.27	32.57

Q CELLS PERFORMANCE WARRANTY





COEFFICIENTS							
efficient of I _{sc}	а	[%/K]	+0.04	Temperature Coefficient of Voc	β	[%/K]	-0.27
		504 1143	0.00		414 (40.00	roms'	100 5 1 110 000

TEMPERATURE C Temperature Coefficient of Page 1

PROPERTIES FOR STSTEW DESIGN									
Maximum System Voltage V _{sys}	[V]	1000 (IEC)/1000 (UL)	Safety Class	11					
Maximum Series Fuse Rating	[A DC]	20	Fire Rating based on ANSI/UL 1703	C (IEC)/TYPE 2 (UL)					
Max. Design Load, Push / Pull ³	[lbs/ft ²]	75 (3600Pa)/55 (2667Pa)	Permitted Module Temperature	-40°F up to +185°F					
Max. Test Load, Push / Pull3	[lbs/ft ²]	113 (5400 Pa) / 84 (4000 Pa)	on Continuous Duty	(-40°C up to +85°C)					

DECDEDTIES FOR SYSTEM DESIGN

QUALIFICATIONS AND CERTIFICATES	PACKAGING INFORMATION				
UL 1703, VDE Quality Tested, CE-compliant, IEC 61215:2016, IEC 61730:2016,	Number of Modules per Pallet	32			
Application Class II, U.S. Patent No. 9,893,215 (solar cells)	Number of Pallets per 53' Trailer	28			
A	Number of Pallets per 40' HC-Conta	iner 24			
	Pallet Dimensions (L×W×H)	71.5 × 45.3 × 48.0 in (1815 × 1150 × 1220 mm)			

Note: installation instructions must be followed. See the installation and operating manual or contact our technical service department for further information on approved installation and use of this product.

Hanwha Q CELLS America Inc.

³ See Installation Manual

400 Spectrum Center Drive, Sulte 1400, Irvine, CA 92618, USA | TEL +1 949 748 59 96 | EMAIL Inquiry@us.q-cells.com | WEB www.q-cells.us

Single Phase Inverter with HD-Wave Technology

for North America

SE3000H-US / SE3800H-US / SE5000H-US / SE6000H-US /

SE7600H-US / SE10000H-US / SE11400H-US





Optimized installation with HD-Wave technology

- Specifically designed to work with power optimizers
- Record-breaking 99% weighted efficiency
- Quick and easy inverter commissioning directly from a smartphone using the SolarEdge SetApp
- Fixed voltage inverter for longer strings
- Integrated arc fault protection and rapid shutdown for NEC 2014, NEC 2017 and NEC 2020 per article 690.11 and 690.12
- UL1741 SA certified, for CPUC Rule 21 grid compliance
- / Small, lightweight, and easy to install both outdoors or indoors
- / Built-in module-level monitoring
- / Optional: Faster installations with built-in consumption metering (1% accuracy) and production revenue grade metering (0.5% accuracy,

solaredge

NVERTERS

/ Single Phase Inverter with HD-Wave Technology for North America

SE3000H-US / SE3800H-US / SE5000H-US / SE6000H-US/ SE7600H-US / SE10000H-US / SE11400H-US

MODEL NUMBER	SE3000H-US	SE3800H-US	SE5000H-US	SE6000H-US	SE7600H-US	SE10000H-US	SE11400H-US	
APPLICABLE TO INVERTERS WITH PART NUMBER			SE	XXXXH-XXXXX	BXX4			
OUTPUT							De-	
Rated AC Power Output	3000	3800 @ 240V 3300 @ 208V	5000	6000 @ 240V 5000 @ 208V	7600	10000	11400 @ 240V 10000 @ 208V	VA
Maximum AC Power Output	3000	3800 @ 240V 3300 @ 208V	5000	6000 @ 240V 5000 @ 208V	7600	10000	11400 @ 240V 10000 @ 208V	VA
AC Output Voltage MinNomMax. (211 - 240 - 264)	~	~	~	~	~	<	~	Vac
AC Output Voltage MinNomMax. (183 - 238 - 229)	-	~	-	√	-	-	✓	Vac
AC Frequency (Nominal)				59.3 - 60 - 60.5				Hz
Maximum Continuous Output Current @240V	12.5	16	21	25	32	42	47.5	А
Maximum Continuous Output Current @208V	-	16	-	24	-	-	48.5	Α
Power Factor			1	, Adjustable - 0.85 to	0.85			
GFDI Threshold				1				A
Utility Monitoring, Islanding Protection, Country Configurable Thresholds				Yes				
INPUT								
Maximum DC Power @240V	4650	5900	7750	9300	11800	15500	17650	W
Maximum DC Power @208V	-	5100	0	7750	- 2	2	15500	W
Transformer-less, Ungrounded				Yes				
Maximum Input Voltage				480				Vdc
Nominal DC Input Voltage			380			400		Vdc
Maximum Input Current @240V ⁽²⁾	8.5	10.5	13.5	16.5	20	27	30.5	Add
Maximum Input Current @208V ⁽²⁾	-	9	-	13.5	-	-	27	Add
Max. Input Short Circuit Current				45				Add
Reverse-Polarity Protection				Yes				
Ground-Fault Isolation Detection				600ka Sensitivity				
Maximum Inverter Efficiency	99			9	99.2			%
CEC Weighted Efficiency				99			99 @ 240V 98.5 @ 208V	%
Nighttime Power Consumption				< 2.5				W

solaredge.com

⁽¹⁾ For other regional settings please contact SolarEdge support (2) A higher current source may be used; the inverter will limit its input current to the values stated

Single Phase Inverter with HD-Wave Technology for North America

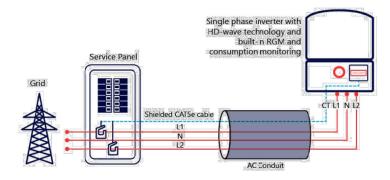
SE3000H-US / SE3800H-US / SE5000H-US / SE6000H-US / SE10000H-US / SE11400H-US

MODEL NUMBER	SE3000H-US	SE3800H-US	SE5000H-US	SE6000H-US	SE7600H-US	SE10000H-US	SE11400H-US				
ADDITIONAL FEATURES					_						
Supported Communication Interfaces	nication Interfaces RS485, Ethernet. ZigBee (optional), Cellular (optional)										
Revenue Grade Metering, ANSI C12.20		0.11.10									
Consumption metering				Optional ⁽³⁾							
Inverter Commissioning		With the SetA	op mobile applicatio	n using Built-in Wi-R	Access Point for Lo	cal Connection					
Rapid Shutdown - NEC 2014, NEC 2017 and NEC 2020, 690.12			Automatic Rapid	Shutdown upon AC	Grid Disconnect						
STANDARD COMPLIANCE											
Safety		UL1741, U	L1741 SA, UL1699B,	CSA C22.2, Canadia	AFCI according to	T.I.L. M-07					
Grid Connection Standards			IEEE:	1547, Rule 21, Rule 1:	(HI)						
Emissions				FCC Part 15 Class B							
INSTALLATION SPECIFICAT	IONS										
AC Output Conduit Size / AWG Range		1"	Maximum / 14-6 AV	VG		1" Maximum /	/14-4 AWG				
DC Input Conduit Size / # of Strings / AWG Range		1" Maxir	num / 1-2 strings / 1-	4-6 AWG		1" Maximum / 1-3 str	rings / 14-6 AWG				
Dimensions with Safety Switch (HxWxD)		17.7 x	14.6 x 6.8 / 450 x 37	0 x 174		21.3 x 14.6 x 7.3 / 5	540 x 370 x 185	in / mn			
Weight with Safety Switch	22	/ 10	25.1 / 11.4	26.2	/ 11.9	38.8/	17.6	lb / kg			
Noise		< 25 < 50						dBA			
Cooling				Natural Convection							
Operating Temperature Range		-40 to +140 / -40 to +50 ⁽⁴⁾									
Protection Rating		NEMA 4X (Inverter with Safety Switch)									

⁽³⁾ Inverter with Reverue Grade Neter P/N: \$2xxxxH-U\$000BNC4; Inverter with Revenue Grade Production and Consumption Meter P/N: \$2xxxxH-U\$000BN14 . For consumption metering, current transformers should be ordered separately; \$EACT0750-200NA-20 or \$EACT0750-400NA-20. 20 units per box

How to Enable Consumption Monitoring

By simply wiring current transformers through the inverter's existing AC conduits and connecting them to the service panel, homeowners will gain full insight into their household energy usage helping them to avoid high electricity bills



⁽⁴⁾ Full power up to at least 50°C / 122°F; for power de-rating information refer to: https://www.solaredge.com/sites/default/files/se-temperature-derating-note-na.pdf

Power Optimizer

For North America

P320 / P340 ' P370 / P400 / P401 / P405 / P485 / P505





PV power optimization at the module-level

- Specifically designed to work with SolarEdge inverters
- / Up to 25% more energy
- ✓ Superior efficiency (99.5%)
- Mitigates all types of module mismatch losses, from manufacturing tolerance to partial
- / Flexible system design for maximum space utilization

- Fast installation with a single bolt
- / Next generation maintenance with modulelevel monitoring
- / Meets NEC requirements for arc fault protection (AFCI) and Photovoltaic Rapid Shutdown System (PVRSS)
- Module-level voltage shutdown for installer and firefighter safety



/ Power Optimizer For North America

P320 / P340 / P370 / P400 / P401 / P405 / P485 / P505

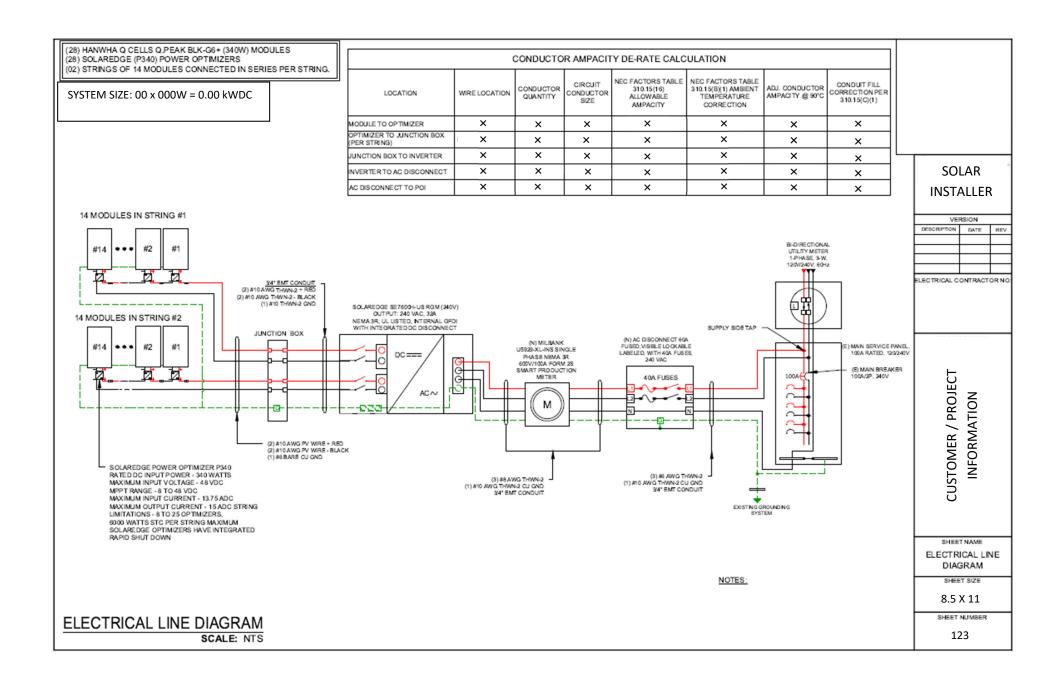
. 525 / . 5 . 6	,	,							
Optimizer model (typical module compatibility)	P320 (for 60-cell modules)	P340 (for high- power 60-cell modules)	P370 (for higher- power 60 and 72- cell modules)	P400 (for 72 & 96-cell modules)	P401 (for high power 60 and 72 cell modules)	P405 (for high- voltage modules)	P485 (for high- voltage modules)	P505 (for higher current modules)	
INPUT									
Rated Input DC Power ⁽¹⁾	320	340	370	4	00	405	485	505	W
Absolute Maximum Input Voltage (Voc at lowest temperature)	4	8	60	80	60	12	512	83©	Vdc
MPPT Operating Range	8 -	48	8 - 60	8 - 80	8-60	12.5	- 105	12.5 - 83	Vdd
Maximum Short Circuit Current (Isc)		11.	47	10.1	11.75		II.	14	Add
Maximum DC Input Current		13.75		12.5	14.65	12	2.5	17.5	Ade
Maximum Efficiency				99	5				96
Weighted Efficiency				98.8				98.6	96
Overvoltage Category				TI					
OUTPUT DURING OPER	ATION (POV	VER OPTIMI	ZER CONNEC	TED TO OPE	RATING SOI	AREDGE IN	VERTER)		
Maximum Output Current				15	5				Ad
Maximum Output Voltage			60				85		Vd
OUTPUT DURING STAND	OBY (POWER	OPTIMIZER	DISCONNECT	ED FROM SO	DLAREDGE IN	VERTER OR	SOLAREDGI	E INVERTER O	OFF)
Safety Output Voltage per Power Optimizer				1±	0.1				Vde
STANDARD COMPLIAN	CE								
EMC			FCC Pa	art15 Class B, IEC6	1000-6-2, IEC6100	0-6-3			
Safety				IEC62109-1 (class	II safety), UL1741				
Material				UL94 V-0 , U	JV Resistant				
RoHS				Ye	S				
INSTALLATION SPECIFIC	CATIONS								
Maximum Allowed System Voltage				100	00				Vde
Compatible inverters			All SolarE	dge Single Phase	and Three Phase i	inverters			
Dimensions (W x L x H)	129 :	(153 × 27.5 / 5.1)	€ 6 × 1.1	129 x 153 x 33.5 / 5.1 x 6 x 1.3	129 x 153 x 29.5 /5.1 x 6 x 1.16	129 x 159 x 49.5	5 / 5.1 x 6.3 x 1.9	129 x 162 x 59 / 5.1 x 6.4 x 2.3	mn /ir
Weight (including cables)		630 / 1.4		750 / 1.7	655 / 1.5	845		1064/23	gr/
Input Connector			MC	4(3)			Single or dual MC4 ⁽³⁾⁽⁴⁾	MC4 ⁽³⁾	
Input Wire Length				0.16 /	0.52				m/
Output Wire Type / Connector				Double Insul	ALTO CONTRACTOR OF THE PARTY OF				
Output Wire Length	0.9 /	2.95			1.2 /	3.9			m/
Operating Temperature Range®				-40 - +85 /					°C /
Protection Rating				IP68 / N					
Relative Humidity		0 - 100							

PV System D a SolarEdge	esign Using Inverter ⁽⁶⁾⁽⁷⁾	Single Phase HD-Wave	Single phase	Three Phase for 208V grid	Three Phase for 277/480V grid	
Minimum String Length	P320, P340, P370, P400, P401	8		10	18	
(Power Optimizers)	P405, P485, P505	6		8	14	
Maximum String Length (Powe	er Optimizers)	25		25	50(1)	
Maximum Power per String		5700 (6000 with SE7600-US - SE11400- US)	5250	600D ⁽⁶⁾	1275010	W
Parallel Strings of Different Len	gths or Orientations			Yes		



⁽¹⁾ State power of the module at STC will not exceed the optimizer "Rated Input DC Power". Modules with up to +5% power tolerance are allowed.
(2) NCC 2017 requires max input voltage be not more than 80.7
(A) For power tolerance are allowed.
(3) NCC 2017 requires max input voltage be not more than 80.7
(A) For power tolerance are allowed.
(4) For foul we seem for parallel connection of two modules use P485-49MDMSM. In the case of an odd number of PV modules in one stirring, installing one P485 dual version power optimizer connected to one PV module. When connecting a single module seal the unused input connectors with the supplied pair of seals.
(5) For arrhester therepeature above ~ 450°C, 1485°F power featuring a spalled Refer to fower Optimizers Theorepeature Book ~ 450°C, 1485°F power featurings. Theorepeature Book ~ 450°C, 1485°F power featurings.

⁽⁶⁾ For detailed string sking information refer to http://www.sokeredge.com/kites/defaul/files/string_sking_na.pdf
(7) It is not allowed to mic PARS/PARS/PSIS with PSIS/PSIS/PSIS/PSIS/PSIS not not bring
(8) A string with more than 30 optimizes does not meet NCF. Grapid shutsborn requirements, safety voltage will be above the 30V requirement.
(9) For 25W yrds it is allowed to indail up to 6.500W per string when the maximum power difference between each string is 1000W
(6) For 27/PSIS/PSIS poil: it is allowed to tradial up to 5.500W per string when the maximum power difference between each string is 1000W
(6) For 27/PSIS/PSIS poil: it is allowed to tradial up to 5.500W per string when the maximum power difference between each string is 2000W



Insurance, Co. **Homeowners Policy Declarations** 123 Main Street Norwich, CT 06360 Policy Number: 000001 Named Insured and Mailing Address Policy Type: Homeowners Tom Smith Sales Rep Name and Address 123 Broad Street Mary Jones 123 Main Street Norwich, CT 06360 Norwich, CT 06360

Additional Named Insured(s)

Location of Insured Property

Coverages and Limits of Liability

123 Broad Street, Norwich CT 06360

Insurance is provided only with respect to the following coverages for which a specific limit of liability is shown. Subject to all conditions of this policy.

Policy Period

To:

Standard Time:

From:

		Section I		Section	II
Α	В	С	D	E	F
Dwelling	Other Structures	Personal Property	Loss of Use	Personal Liability Each Occurrence	Medical Payments to Others

Deductible	(In case of loss under Section I, we cover only that part of the loss over the deductible(s))

Discount Information

Discount Category	Discounts Applied		Savings
-			
		Your Discounts Saved You:	

Forms and Endorsements (Additional policy endorsements, if any, will be shown on page 2 of this Declarations.)

Number/Edition Forms and Endorsements Made Part of this Policy Limit (if applicable) Premium

001 002 003 Homeowners Policy

Base Policy Premium:
Endorsement Premium:
Total Premium: