Building Codes: 2017 NEC, 2018 IBC, 2018 IFC, 2018 IRC and AHJ Amendments

SPIVEY, STEPHEN PV SYSTEM 131 EDNA JOHN COURT . DUNN, NC, 28334 APN: 021537 0110 09 JURISDICTION: HARNETT COUNTY (NC) GENERAL INFORMATION

SYSTEM SIZE:

ROOF PITCHED: INVERTER:

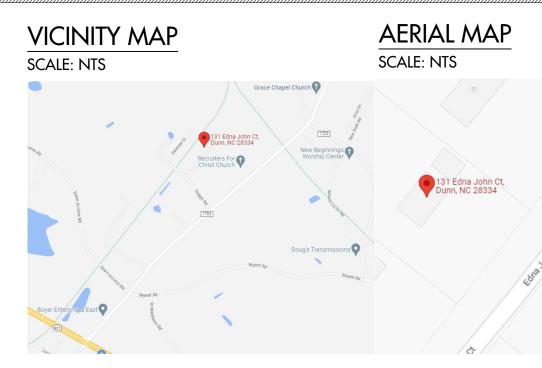
MODULES: STRINGS: ELECTRICAL SERVICE RATING: PV SYSTEM OVERCURRENT RATING: PV SYSTEM DISCONNECT SWITCH: ROOF TYPE: ROOF FRAMING: RACKING/RAILING: ATTACHMENT METHOD:

ROOF ATTACHMENT :

10.400 kW-DC-STC 10.000 kW-AC 14 DEGREES (1) SOLAREDGE ENERGYHUB SE10000H-US W/ S440 OPTIMIZERS (1) SE ENERGYBANK 10K (26) HY-DH108P8-400B (1) x 14 (1) x 12 MODULE SERIES STRINGS 200A 100A EATON DG223NRB (100A / 2P) COMP SHINGLE ENGINEERED TRUSS K2 SYSTEMS / K2RAIL SPLICE FOOT M5 x 60 S.S LAG SCREWS

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EC	QUIPMENT LOCATION	GE	ENE
1.	ALL EQUIPMENT SHALL MEET MINIMUM SETBACKS AS REQUIRED BY NEC 110.26.	1.	МО
2.	WIRING SYSTEMS INSTALLED IN DIRECT SUNLIGHT MUST BE RATED FOR		STA
	EXPECTED OPERATING TEMPERATURE AS SPECIFIED BY NEC690.31(A),(C) AND	2.	INV
	NEC TABLES 310.15(B)(2)(A) AND 310.15(B)(3)(C).		STA
3.	JUNCTION AND PULL BOXES PERMITTED INSTALLED UNDER PV MODULES	3.	DRA
	ACCORDING TO NEC 690.34.		ARR
4.	ADDITIONAL AC DISCONNECT(S) SHALL BE PROVIDED WHERE THE INVERTER IS		MIG
	NOT WITHIN SIGHT OF THE AC SERVICING DISCONNECT.	4.	WC
5.	ALL EQUIPMENT SHALL BE INSTALLED ACCESSIBLE TO QUALIFIED PERSONNEL		WIL
	ACCORDING TO NEC APPLICABLE CODES.	5.	ALL
6.	ALL COMPONENTS ARE LISTED FOR THEIR PURPOSE AND RATED FOR OUTDOOR		GRC
	USAGE WHEN APPROPRIATE.	6.	ALL
W	IRING & CONDUIT NOTES		OT⊦
1.	ALL CONDUITS AND WIRE WILL BE LISTED AND APPROVED FOR THEIR PURPOSE.	7.	WH
	CONDUIT AND WIRE SPECIFICATIONS ARE BASED ON MINIMUM CODE		COI
	REQUIREMENTS AND ARE NOT MEANT TO LIMIT UP-SIZING.	8.	THE
2.	CONDUCTORS SIZED ACCORDING TO NEC 690.8, NEC 690.7.		UNT
3.	DC WIRING LIMITED TO MODULE FOOTPRINT. MICRO INVERTER WIRING	9.	ROC
	SYSTEMS SHALL BE LOCATED AND SECURED UNDER THE ARRAY WITH SUITABLE		REQ
	WIRING CLIPS.		SUC
4.	AC CONDUCTORS COLORED OR MARKED AS FOLLOWS: PHASE A OR L1- BLACK,		WIT
	PHASE B OR L-2 RED, OR OTHER CONVENTION IF THREE PHASE, PHASE C OR	10.	PV A
	L3-BLUE, YELLOW, ORANGE, OR OTHER CONVENTION NEUTRAL- WHITE OR		ARR
	GREY IN 4-WIRE DELTA CONNECTED SYSTEMS THE PHASE WITH THE HIGHER		

VOLTAGE TO BE MARKED ORANGE NEC 110.15.

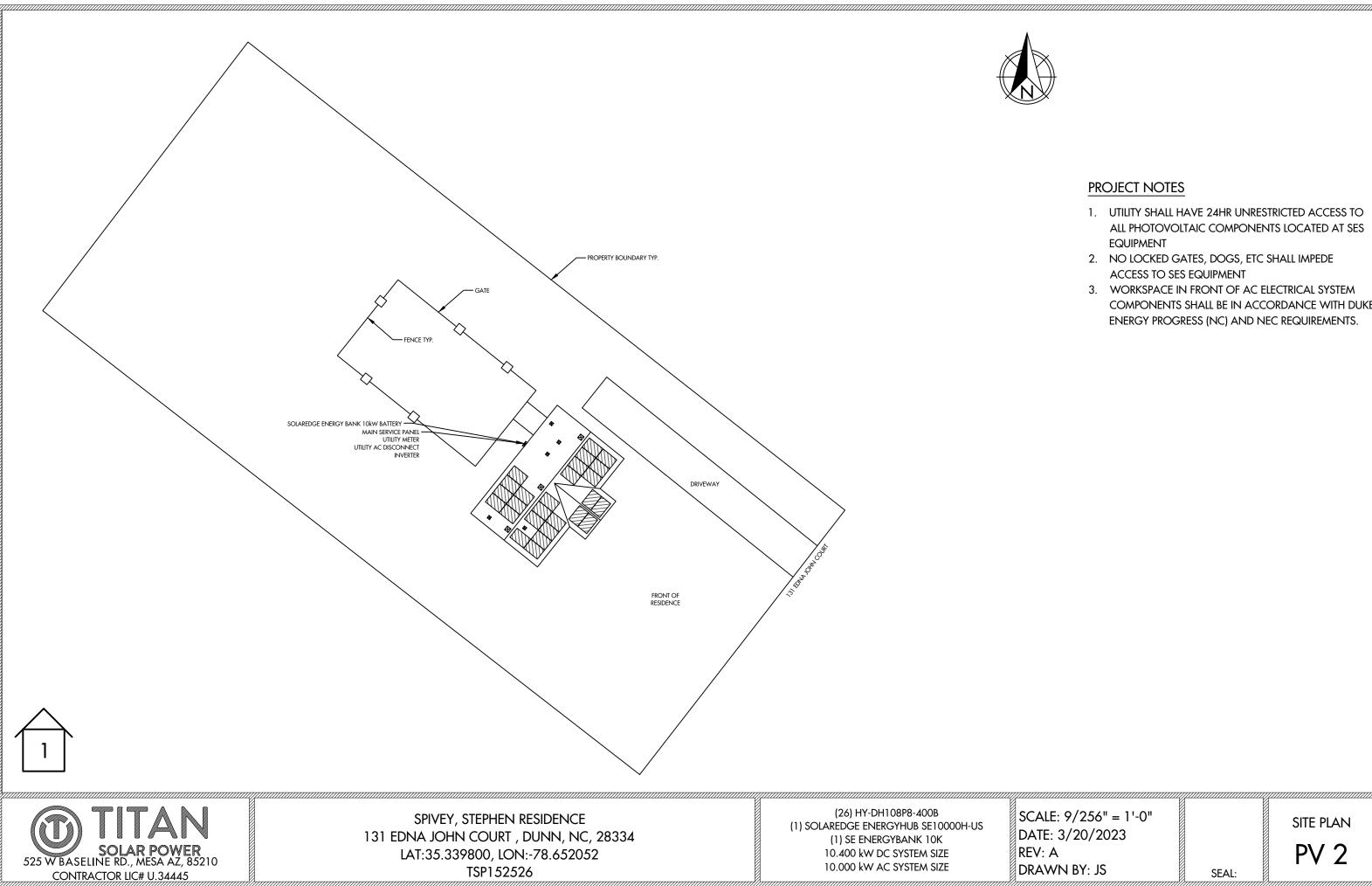


SPIVEY, STEPHEN RESIDENCE 131 EDNA JOHN COURT , DUNN, NC, 28334 LAT:35.339800, LON:-78.652052 TSP152526

ERAL NOTES

- DDULES ARE LISTED UNDER UL 1703 AND CONFORM TO THE ANDARDS.
- VERTERS ARE LISTED UNDER UL 1741 AND CONFORM TO THE ANDARDS.
- AWINGS ARE DIAGRAMMATIC, INDICATING GENERAL
- RANGEMENT OF THE PV SYSTEM AND THE ACTUAL SITE CONDITION GHT VARY.
- ORKING CLEARANCES AROUND THE NEW PV ELECTRICAL EQUIPMENT ILL BE MAINTAINED IN ACCORDANCE WITH NEC 110.26.
- L GROUND WIRING CONNECTED TO THE MAIN SERVICE
- OUNDING IN MAIN SERVICE PANEL/SERVICE COMPONENT.
- L CONDUCTORS SHALL BE 600V, 75° C STANDARD COPPER UNLESS THERWISE NOTED.
- HEN REQUIRED, A LADDER SHALL BE IN PLACE FOR INSPECTION IN DMPLIANCE WITH OSHA REGULATIONS.
- IE SYSTEM WILL NOT BE INTERCONNECTED BY THE CONTRACTOR NTIL APPROVAL FROM THE LOCAL JURISDICTION AND/OR THE UTILITY. DOF ACCESS POINT SHALL BE LOCATED IN AREAS THAT DO NOT QUIRE THE PLACEMENT OF GROUND LADDERS OVER OPENINGS ICH AS WINDOWS WHERE THE ACCESS POINT DOES NOT CONFLICT ITH OVERHEAD OBSTRUCTIONS SUCH AS TREES, WIRES OR SIGNS. ARRAY COMBINER/JUNCTION BOX PROVIDES TRANSITION FROM RRAY WIRING TO CONDUIT WIRING.

DATE: 3/20/2023		COVER PAGE
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	SEAL:	



- COMPONENTS SHALL BE IN ACCORDANCE WITH DUKE

ARRAY INFORMATION		<u></u>
AR-01		
QUANTITY: 8		R
MOUNTING TYPE: FLUSH		
ARRAY TILT: 14°		X
AZIMUTH: 129°		
ATTACHMENT SPACING: 4' STAGGERED		
ROOF TYPE: COMP SHINGLE		
<u>AR-02</u>		
QUANTITY: 7		
MOUNTING TYPE: FLUSH		
ARRAY TILT: 14°		
AZIMUTH: 129°	$ \qquad \qquad$	
ATTACHMENT SPACING: 4' STAGGERED		
ROOF TYPE: COMP SHINGLE		
AR-03		
QUANTITY: 2		
MOUNTING TYPE: FLUSH		
ARRAY TILT: 22°		
AZIMUTH: 219° ATTACHMENT SPACING: 4' STAGGERED		
ROOF TYPE: COMP SHINGLE		
<u>AR-04</u>		
QUANTITY: 2		
MOUNTING TYPE: FLUSH		
ARRAY TILT: 22°		
AZIMUTH: 39°		
ATTACHMENT SPACING: 4' STAGGERED ROOF TYPE: COMP SHINGLE	$\langle \langle \langle \gamma \rangle \rangle \rangle = \langle \langle \gamma \rangle \rangle \langle \langle \gamma \rangle $	
	₹ ¹ ² ³ ³ C ¹ ³ C¹³³³ C¹³³³ C¹³³³ C¹³³ C¹³³ C¹³³ C¹³ C¹³ C¹³ C¹³ C¹³ C¹³ C¹³ C¹³ C¹³ C¹³ C¹³ C¹³ C¹³ C¹³ C¹³ C¹³ C¹³ C¹³ C¹³ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C¹ C	
AR-05	EO. HANKER	
QUANTITY: 7		
MOUNTING TYPE: FLUSH	$ \qquad \qquad$	
ARRAY TILT: 14°	× × × × × ×	
AZIMUTH: 309°		
ATTACHMENT SPACING: 4' STAGGERED ROOF TYPE: COMP SHINGLE		
	\times	



SPIVEY, STEPHEN RESIDENCE 131 EDNA JOHN COURT , DUNN, NC, 28334 LAT:35.339800, LON:-78.652052 TSP152526 (26) HY-DH108P8-400B (1) SOLAREDGE ENERGYHUB SE10000H-US (1) SE ENERGYBANK 10K 10.400 kW DC SYSTEM SIZE 10.000 kW AC SYSTEM SIZE



NOTES ROOF VENTS, SKYLIGHTS, WILL NOT BE COVERED UPON PV INSTALLATION

- TOTAL ROOF AREA = 1467 SQ-FT
- TOTAL ARRAY AREA = 546.59 SQ-FT
- ARRAY COVERAGE = 37.26%
- •
- •

		4
CALE: 1/8" = 1'-0"		PV LAYOUT
ATE: 3/20/2023		
EV:A		PV 3
rawn by: JS	SEAL:	- , -

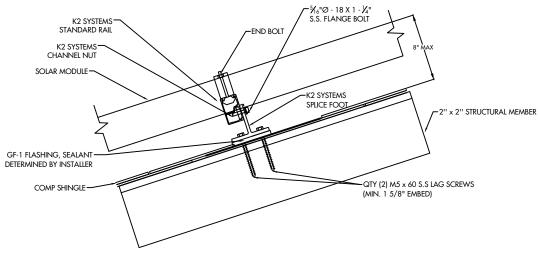
MODULE & RACKING INFORMATION MODULE: HY-DH108P8-400B

MODULE WEIGHT: 49.80 LBS MODULE DIMENSIONS: 67.8''x 44.65'' x 1.5" RACKING/RAIL: K2 SYSTEMS / K2RAIL ROOF ATTACHMENT : M5 x 60 S.S LAG SCREWS

ROOF & FRAMING INFORMATION MATERIAL: COMP SHINGLE RAFTER/TRUSS SIZE: 2" x 2" RAFTER/TRUSS SPACING: 2'

ARRAY 01: 8 MODULES	ARRAY 04: 2 MODULES
<u>UPLIFT = 5045.45 LBS.</u>	$\underline{\text{UPLIFT}} = \underline{1261.36 \text{ LBS.}}$
POINT LOAD = 19.38 LBS. PER MOUNTING POINT	POINT LOAD = 17.77 LBS. PER MOUNTING POINT
PULLOUT STRENGTH = 6930.00 LBS.	$\underline{PULLOUT \ STRENGTH} = \underline{1890.00 \ LBS}.$
$\underline{\text{DISTRIBUTED LOAD}} = \underline{2.54 \text{ PSF}}$	DISTRIBUTED LOAD = 2.54 PSF
MODULE & RACKING WEIGHT = 426.40 LBS	MODULE & RACKING WEIGHT = 106.60 LBS

ARRAY 02: 7 MODULES	ARRAY 05: 7 MODULES
$\underline{\text{UPLIFT}} = \frac{4414.77 \text{ LBS.}}{2}$	$\underline{\text{UPLIFT}} = \underline{4414.77 \text{ LBS.}}$
POINT LOAD = 20.73 LBS. PER MOUNTING POINT	POINT LOAD = 20.73 LBS. PER MOUNTING POINT
<u>PULLOUT STRENGTH = 5670.00 LBS.</u>	<u>PULLOUT STRENGTH = 5670.00 LBS.</u>
$\underline{\text{DISTRIBUTED LOAD}} = \underline{2.54 \text{ PSF}}$	$\underline{\text{DISTRIBUTED LOAD}} = \underline{2.54 \text{ PSF}}$
MODULE & RACKING WEIGHT = 373.10 LBS	MODULE & RACKING WEIGHT = 373.10 LBS



ARRAY 03: 2 MODULES

UPLIFT = 1261.36 LBS.

POINT LOAD = 17.77 LBS. PER MOUNTING POINT

PULLOUT STRENGTH = 1890.00 LBS.

DISTRIBUTED LOAD = 2.54 PSF

MODULE & RACKING WEIGHT = 106.60 LBS

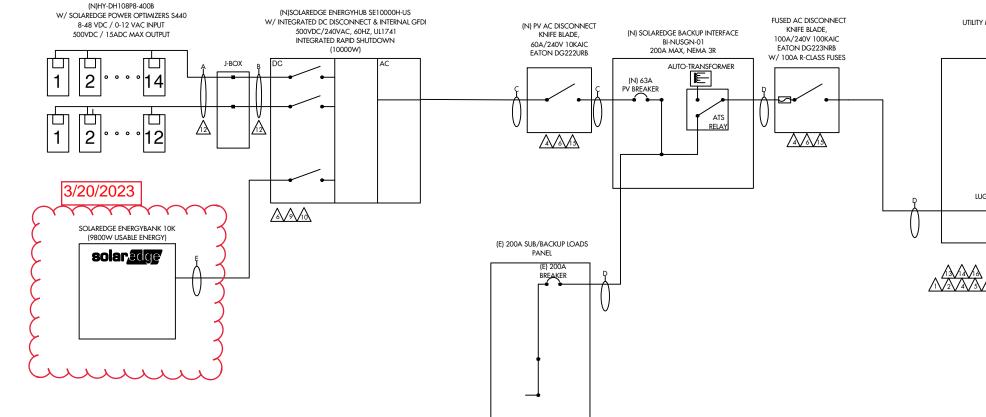


SPIVEY, STEPHEN RESIDENCE 131 EDNA JOHN COURT, DUNN, NC, 28334 LAT:35.339800, LON:-78.652052 TSP152526

(26) HY-DH108P8-400B (1) SOLAREDGE ENERGYHUB SE10000H-US (1) SE ENERGYBANK 10K 10.400 kW DC SYSTEM SIZE 10.000 kW AC SYSTEM SIZE

ATE: 3/20/2023				DETAILS	
EV:A RAWN BY: JS		SEAL.		PV 4	
	8	SEAL:	12		

PV MODULE M	/IRE SCHEDULE	C - (3) #6 AWG-CU THWN-2 WIRE (HR)	MAIN SERVICE PAN	<u>1EF</u>
** = 400 **	- (4) #10 AWG-CU PV WIRE (HR) (1) #10 AWG-CU BARE COPPER WIRE (GND)	(1) #8 AWG-CU THWN-2 WIRE (GND) 3/4'' EMT D - (3) #3 AWG-CU THWN-2 WIRE (HR)	BUS RATING MAX. CURRENT RATING	= =
ISC = 13.79 ADC VOC = 37.07 VDC IMP = 12.90 ADC VMP = 31.21 VDC	(1) #10 AWG-CU BARE COFFER WIRE (GND) IN FREE AIR - (4) #10 AWG-CU THWN-2 WIRE (HR) (1) #10 AWG-CU THWN-2 WIRE (GND)	(1) #6 AWG-CU THWN-2 WIRE (GND) 1'' EMT E - (3) #6 AWG-CU THWN-2 WIRE (HR)	SOLAR BACKFEED MAIN BREAKER TOTAL	= =
VMP = 31.21 VDC TVOC = -0.304% / °C	3/4" EMT	(1) #8 AWG-CU THWN-2 WIRE (GND) 3/4" EMT	IOTAL	=



WIRE SIZE CALCULATIONS

TEMP CORRECTION FACTOR: 0.87 (43° AMBIENT) ROOFTOP TEMP CORRECTION FACTOR: 1.00 (43° ADJUSTED) (2" ABOVE ROOFTOP / 0° TEMP ADDERS - AS OCCURS) (TEMP DATA TAKEN FROM ASHRAE 2% AVG HIGH TEMP)

DC WIRING CONDUIT FILL FACTOR = OPTIMIZER MAX. CURRENT = #10- AWG CU. AMPACITY = FREE AIR #10 - AWG CU. AMPACITY = ROOFTOP CONDUIT

0.80 18.75A DC (15.00A X 1 X 1.25) 47.85A (55A X 0.87) 27.84A (40A X 0.87 X 0.80) AC WIRING CONDUIT FILL FACTOR MAX. INVERTER CURRENT

MIN. INVERTER OCP = INVERTER OCP = #6 - AWG CU AMPACITY =

1 (3) CONDUCTORS

=

=

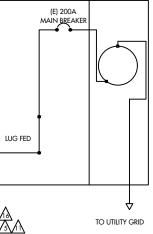
- 42A (PER INVERTER SPECS)
- 52.5A (42A X 1.25)
- 60A
- 65.25A (75A X 1 X 0.87)



SPIVEY, STEPHEN RESIDENCE 131 EDNA JOHN COURT , DUNN, NC, 28334 LAT:35.339800, LON:-78.652052 TSP152526 (26) HY-DH108P8-400B (1) SOLAREDGE ENERGYHUB SE10000H-US (1) SE ENERGYBANK 10K 10.400 kW DC SYSTEM SIZE 10.000 kW AC SYSTEM SIZE

DA RE\ DR/ 200A 240A (200A X 1.2) 53A 200A 253A

Utility meter & (e) 200A main service panel 1 $\Phi,$ 3W, 120/240V, 60HZ



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TE: 3/20/2023		ONE LINE
v:A AWN BY: JS	SEAL:	PV 5

(1) #10 AWG-CU THWN-2 WIRE (GND) E - (3) #6 AWG-CU THWN-2 WIRE (HR) TOTAL = 3/4" EMT (1) #8 AWG-CU THWN-2 WIRE (GND) 3/4" EMT TOTAL = (NINT-DH108P8-4008 (NISOLAREDGE ENERGYHUB SE10000H-US 3/4" EMT TOTAL = (NINT-DH108P8-4008 (NISOLAREDGE ENERGYHUB SE10000H-US (NISOLAREDGE ENERGYHUB SE1000H-US (NISOLAREDGE ENERGYHUB SE1000H-US (NISOLAREDGE ENERGYHUB SE100H-US (NISOLAREDGE ENERGYHUB SE10H-US (NISOLAREDGE ENE	INEC SCITE/DOLL (1) #8 AWG-CU THWN-2 WIRE (GND) (-(4) #10 AWG-CU PV WIRE (HR) 3/4" EMT (1) #10 AWG-CU BARE COPPER WIRE (GND) 3/4" EMT D - (3) #3 AWG-CU THWN-2 WIRE (HR) (1) #6 AWG-CU THWN-2 WIRE (GND) IN FREE AIR D - (3) #3 AWG-CU THWN-2 WIRE (GND) (1) #10 AWG-CU THWN-2 WIRE (HR) (1) #6 AWG-CU THWN-2 WIRE (GND) (1) #10 AWG-CU THWN-2 WIRE (GND) 1" EMT SOLAR BACKFEED = (1) #10 AWG-CU THWN-2 WIRE (GND) 1" EMT E - (3) #6 AWG-CU THWN-2 WIRE (GND) 3/4" EMT SOLAR BACKFEED = MIN BREAKER = TOTAL = MIN SOLAREDGE ENERGYHUB SEI0000H US W/ INTERNAL GFDI W/ SOLAREDGE FOWER OFTIMERES SAMD W/ INTERNAL GFDI SOUDC / 130C MAX OUTPUT W/ INTEGRATED C INSCONNECT W/ SOLAREDGE FOWER OFTIMERES SAMD W/ INSCLAREDGE ENERGYHUB SEI0000H US W/ INTEGRATED C INSCONNECT W/ INSCLAREDGE BACKUP INTERNAL GFDI SOUDC / 130C MAX OUTPUT W/ INSCLAREDGE ENERGYHUB SEI0000H US W/ INSCLAREDGE FOWER OFTIMERES SAMD W/ INSCLAREDGE BACKUP INTERNAL GFDI SOUDC / 130C MAX OUTPUT W/ INSCLAREDGE BACKUP INTERNAL GFDI W/ INSCLAR
ADC = 37,07 VDC II # #10 AWG-CU THWN-2 WIRE (HR) II" EMT MAIN BREAKER = MP = 11,1 #10 AWG-CU THWN-2 WIRE (GND) II" EMT II" EMT MAIN BREAKER = VOC = -0.304% / °C 3/4" EMT II" EMT II" EMT III" EMT III" EMT VOC = -0.304% / °C 3/4" EMT II" EMT III" EMT III" EMT III" EMT VOC = -0.304% / °C 3/4" EMT III # 8 AWG-CU THWN-2 WIRE (GND) III" EMT III" EMT III" EMT III" EMT VOC = -0.304% / °C 3/4" EMT III" EM	VOC = 37.07 VDC IN FREE AIR IN FREE AIR SOLAR BACKFEED = MP = 12.90 ADC 6'(4) #10 AWG-CU THWN-2 WIRE (HR) 1'' EMT SOLAR BACKFEED = VOC = 0.304% / °C 3/4'' EMT 1'' EMT SOLAR BACKFEED = VOC = 0.304% / °C 3/4'' EMT 1'' EMT SOLAR BACKFEED = MIN BEAKER 1'' EMT 1'' EMT TOTAL = VOC = 0.304% / °C 3/4'' EMT NONARDOG FOWER OTHWN-2 WIRE (GND) 3/4'' EMT TOTAL =
$VMP = 31.21 VDC \qquad (1) \#10 AWG-CU THWN-2 WIRE (GND) TVOC = -0.304\% / °C 3/4" EMT E - (3) #6 AWG-CU THWN-2 WIRE (GND) 3/4" EMT TOTAL = (1) #8 AWG-CU THWN-2 WIRE (GND) 3/4" EMT TOTAL = (N)SOLAREDGE FORMER OFINIZERS SAIOB-48 VDC / 0-12 VAC INNUTSOUNDC / SAIC MAX OUTPUT UNITEGRATED DC DISCONNECT & INTERNAL GFDI SOUNDC / 240VAC, 60HZ, U1741INTEGRATED RAPB SHIDDOWN (DOWN)HOC _ AC _ C _ C _ AC _ C _ C _ C _ C _ C $	VMP = 31.21 VDC TVOC = -0.304% / °C (1) #10 AWG-CU THWN-2 WIRE (GND) 3/4" EMT E - (3) #6 AWG-CU THWN-2 WIRE (HR) (1) #8 AWG-CU THWN-2 WIRE (GND) 3/4" EMT TOTAL =
W/ SOLAREDGE POWER OPTIMIZERS \$440 8-48 VDC / 0-12 VAC INPUT 500VDC / 15ADC MAX OUTPUT W/ INTEGRATED RAPID SHUTDOWN 10000W W/ INTEGRATED RAPID SHUTDOWN (10000W) W/ INTEGRATED RAPID SHUTDOWN	W/ SOLAREDGE POWER OPMIZERS SLAD (NISDLAREDGE ENERGYHUB SE10000H-US NITEGRATED BACHDISCONNECT INTERNAL GEDI SOVDC/240VAC, 60HZ, ULT74 INTEGRATED BAPD SHUTDOWN (N) PV AC DISCONNECT NITE BLADE, 60A/240V 10KALC (N) SOLAREDGE BACKDISCONNECT NISTE BLADE, 100A/240V 10KALC (N) SOLAREDGE NISTE BLADE, 100A/240V 10KALC

WIRE SIZE CALCULATIONS

TEMP CORRECTION FACTOR: 0.87 (43° AMBIENT) ROOFTOP TEMP CORRECTION FACTOR: 1.00 (43° ADJUSTED) (2" ABOVE ROOFTOP / 0° TEMP ADDERS - AS OCCURS) (TEMP DATA TAKEN FROM ASHRAE 2% AVG HIGH TEMP)

DC WIRING CONDUIT FILL FACTOR = OPTIMIZER MAX. CURRENT = #10- AWG CU. AMPACITY = FREE AIR #10 - AWG CU. AMPACITY = **ROOFTOP CONDUIT**

0.80 18.75A DC (15.00A X 1 X 1.25) 47.85A (55A X 0.87) 27.84A (40A X 0.87 X 0.80)

AC WIRING CONDUIT FILL FACTOR MAX. INVERTER CURRENT =

- MIN. INVERTER OCP INVERTER OCP #6 - AWG CU AMPACITY =
- 1 (3) CONDUCTORS

=

=

=

- 42A (PER INVERTER SPECS)
- 52.5A (42A X 1.25)
- 60A
- 65.25A (75A X 1 X 0.87)

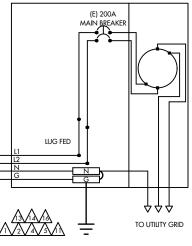


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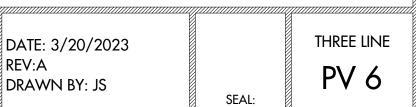
(26) HY-DH108P8-400B (1) SOLAREDGE ENERGYHUB SE10000H-US (1) SE ENERGYBANK 10K 10.400 kW DC SYSTEM SIZE 10.000 kW AC SYSTEM SIZE

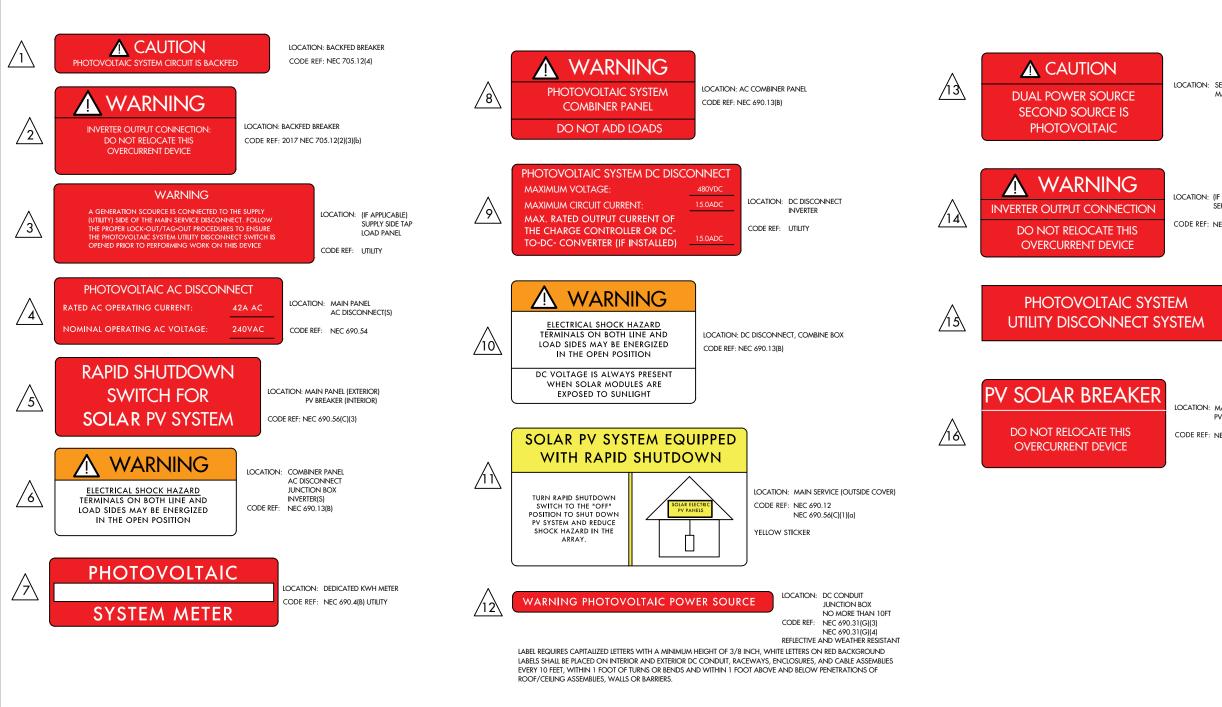
200A 240A (200A X 1.2) 53A 200A 253A

ILITY METER & (E) 200A MAIN SERVICE PANEL 1Φ, 3W, 120/240V, 60HZ



(E) GROUNDING ELECTRODE







SPIVEY, STEPHEN RESIDENCE 131 EDNA JOHN COURT, DUNN, NC, 28334 LAT:35.339800, LON:-78.652052 TSP152526

(26) HY-DH108P8-400B (1) SOLAREDGE ENERGYHUB SE10000H-US (1) SE ENERGYBANK 10K 10.400 kW DC SYSTEM SIZE 10.000 kW AC SYSTEM SIZE

LOCATION: SERVICE METER MAIN PANEL

LOCATION: (IF APPLICABLE) SERVICE PANEL

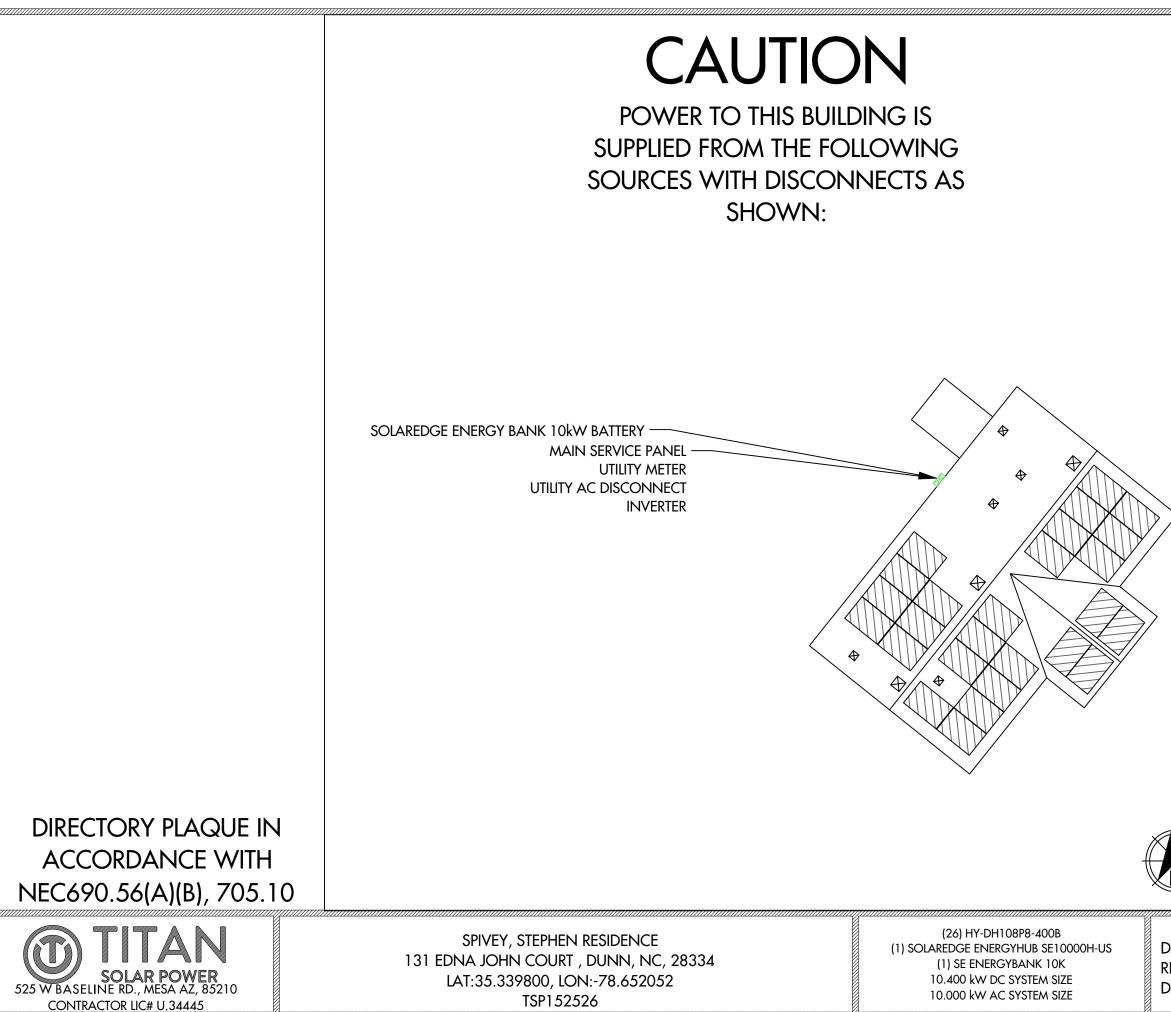
CODE REF: NEC 705.12(7)

LOCATION: AC DISCONNECT CODE REF: UTILITY

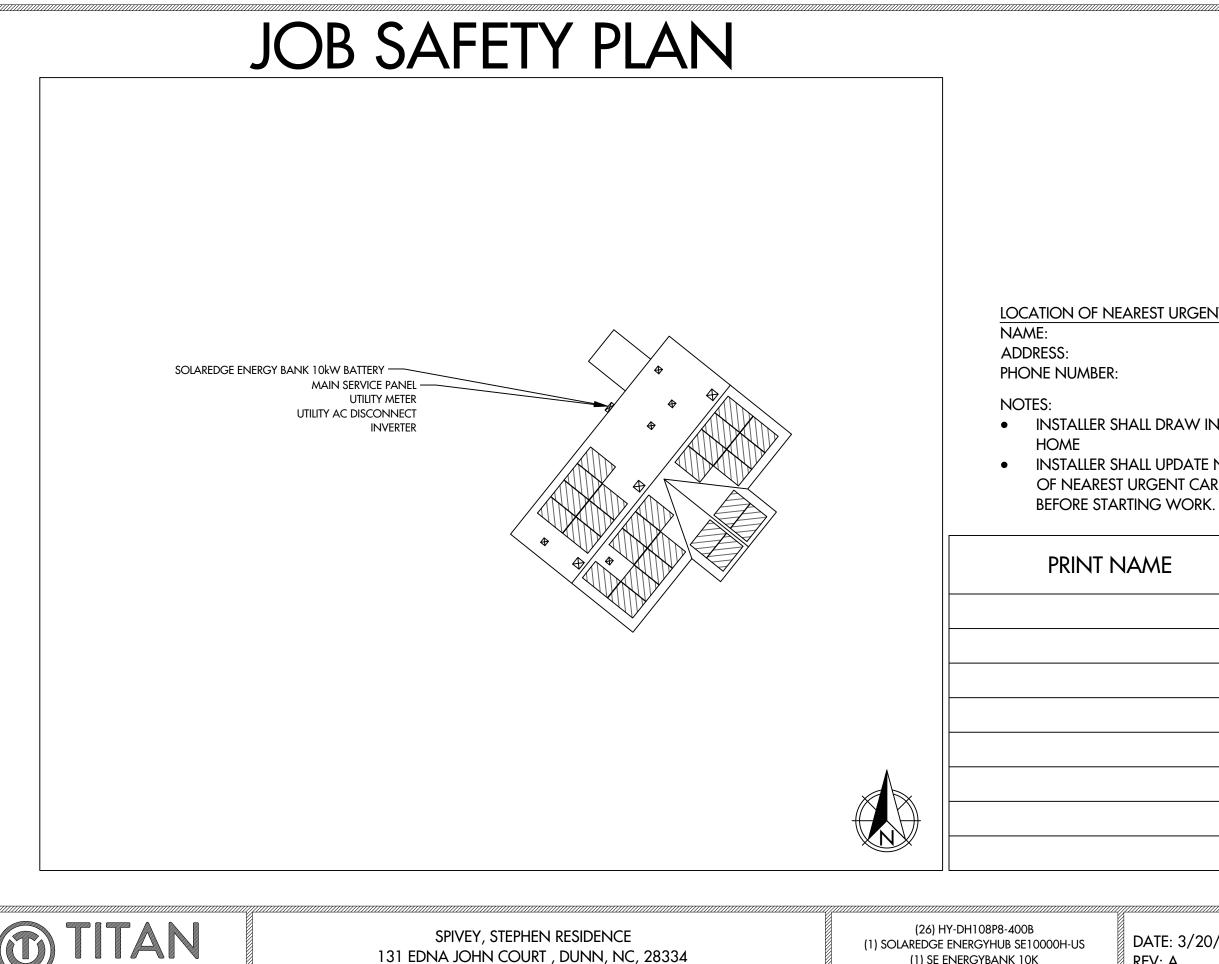
LOCATION: MAIN PANEL:(EXTERIOR) PV BREAKER: (INTERIOR)

CODE REF: NEC 705.12(B)(2)(3)(B)

DATE: 3/20/2023		LABELS
REV: A DRAWN BY: JS	SEAL	PV 7



ATE: 3/20/2023 EV: A RAWN BY: JS SEAL: PLACARD PV 8					
EV: A DRAWN BY: JS BEAL: PV 8					
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EV: A DRAWN BY: JS BEAL: PV 8) ATE: 3/2	20/2023		PLA	CARD
DRAWN BY: JS PV 8 SEAL:	EV: A	-,			
		BY: JS		P\	V X
		L			



TSP152526

LAT:35.339800, LON:-78.652052 525 W BASELINE RD., MESA AZ, 85210

SOLAR POWER

CONTRACTOR LIC# U.34445

(1) SE ENERGYBANK 10K 10.400 kW DC SYSTEM SIZE 10.000 kW AC SYSTEM SIZE

RE DR

LOCATION OF NEAREST URGENT CARE FACILITY

INSTALLER SHALL DRAW IN DESIGNATED SAFETY AREA AROUND

INSTALLER SHALL UPDATE NAME, ADDRESS, AND PHONE NUMBER OF NEAREST URGENT CARE FACILITY RELATIVE TO THE JOB SITE

ME	INITIAL	YES	NO
		•	

ATE: 3/20/2023
EV: A
RAWN BY: JS

SAFETY PLAN **PV 9**

Single Phase Energy Hub **Inverter with Prism Technology**

For North America

SE3000H-US / SE3800H-US / SE6000H-US / SE7600H-US / SE10000H-US / SE11400H-US⁽¹⁾



Optimized battery storage with HD-Wave technology

- Record-breaking 99% weighted efficiency with 200% DC oversizing
- Small, lightweight, and easy to install
- Modular design, future ready with optional upgrades to:

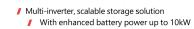
SOLAR POW

525 W BASELINE RD., MESA AZ, 85210

CONTRACTOR LIC# U.34445

- / DC-coupled storage for full or partial home backup Built-in consumption monitoring
- / Direct connection to the SolarEdge smart EV charger

solaredge.com



- Integrated arc fault protection and rapid shutdown for NEC 2014, NEC 2017 and NEC 2020, per article 690.11 and 690.12
- Embedded revenue grade production data, ANSI C12.20 Class 0.5

/ Single Phase Energy Hub Inverter with Prism Technology For North America

SE3000H-US / SE3800H-US / SE6000H-US / SE7600H-US / SE10000H-US / SE11400H-US⁽¹⁾

	SE3000H-US	SE3800H-US	SE6000H-US	SE7600H-US	SE10000H-US	SE11400H-US	UNITS
OUTPUT - AC ON GRID							
Rated AC Power	3000	3800 @ 240V 3300 @ 208V	6000 @ 240V 5000 @ 208V	7600	10000	11400 @ 240V 10000 @ 208V	W
Maximum AC Power Output	3000	3800 @ 240V 3300 @ 208V	6000 @ 240V 5000 @ 208V	7600	10000	11400 @ 240V 10000 @ 208V	W
AC Frequency Range (min - nom - max)			59.3 - 60	- 60.5(2)			Hz
Maximum Continuous Output Current @ 240V	12.5	16	25	32	42	47.5	A
Maximum Continuous Output Current @ 208V	-	16	24	-	-	48.5	A
GFDI Threshold			1				A
Total Harmonic Distortion (THD)			<	3			%
Power Factor			1, adjustable	-0.85 to 0.85			
Utility Monitoring, Islanding Protection, Country Configurable Thresholds			Ye	95			
Charge Battery from AC (if allowed)			Ye	25			
Typical Nighttime Power Consumption			<2				W
OUTPUT - AC BACKUP ⁽³⁾							
Rated AC Power in Backup Operation ⁽⁴⁾	3000	3800	6000	7600	10000	10300	W
Rated AC Fower III Backup Operation	3000	7600*	0000	10300*	10000	10300	vv
AC L-L Output Voltage Range in Backup			211 -	264			Vac
AC L-N Output Voltage Range in Backup			105 -	132			Vac
AC Frequency Range in Backup (min - nom - max)	55 - 60 - 65					Hz	
Maximum Continuous Output Current in Backup Operation	12.5	16 32*	- 25	32 43*	42	43	A
GFDI			1				A
THD			<	5			%
OUTPUT - SMART EV CHARGER AC							
Rated AC Power			96	00			W
AC Output Voltage Range			211 -	264			Vac
On-Grid AC Frequency Range (min - nom - max)			59.3 - 6	0 - 60.5			Hz
Maximum Continuous Output Current @240V (grid, PV and battery)			4	D			Aac
INPUT - DC (PV AND BATTERY)							
Transformer-less, Ungrounded			Ye	25			
Max Input Voltage			48	80			Vdc
Nom DC Input Voltage			38	10			Vdc
Reverse-Polarity Protection			Ye	25			
Ground-Fault Isolation Detection			600kΩ S	ensitivity			
INPUT - DC (PV)				,			
Maximum DC Power @ 240V	6000	7600	12000	15200 22800*	22000	22800	W
Maximum DC Power @ 208V	-	6600	10000	-	-	20000	W
Maximum Input Current ⁽⁵⁾ @ 240V	8.5	10.5	16.5	20	27	31	Adc
Maximum Input Current ⁽⁵⁾ @ 208V	_	9	13.5	-	-	27	Adc
Maximum Input Current @ 2080 Max. Input Short Circuit Current	-	9	13.5		-	21	Adc
Max. Input short Circuit Current Maximum Inverter Efficiency	99		4	99.2			Adc %
· · · · · · · · · · · · · · · · · · ·	33	I		33.4		99 @ 240V	
CEC Weighted Efficiency			99			99 @ 240V 98.5 @ 208V	%
2-pole Disconnection	1		Ye	25			1

/ Single Phase Energy Hub Inverter with Prism Technology For North America

INPUT - DC (BATTERY)							
Supported Battery Types		Sola	arEdge Energy Ban	k, LG RESU Prime ⁽⁶⁾			
Number of Batteries per Inverter		Up to 3 So	larEdge Energy Ba	nk, up to 2 LG RESL	l Prime		
Continuous Power®	6000	7600		100	000		W
Peak Power ⁽⁷⁾	6000	7600		100	00		W
Max Input Current	16	20		26	i.5		Adc
2-pole Disconnection			Y	ès			
SMART ENERGY CAPABILITIES	1						0.000000
Consumption Metering			Built	- in ⁽⁸⁾			
Backup & Battery Storage	With Ba	ckup Interface (pur	chased separately)	for service up to 20	00A; Up to 3 inverte	rs	
EV Charging		[Direct connection t	Smart EV charger			
ADDITIONAL FEATURES							
Supported Communication Interfaces		RS485, Ethernet,	Cellular ⁽⁹⁾ , Wi-Fi (or	tional),SolarEdge E	nergy Net (optional)	
Revenue Grade Metering, ANSI C12.20	Built - in®						
Integrated AC, DC and Communication Connection Unit	Yes						
Inverter Commissioning	With the SetApp mobile application using built-in Wi-Fi Access Point for local connection						
DC Voltage Rapid Shutdown (PV and Battery)	Yes, according to NEC 2014, NEC 2017 and NEC 2020 690.12						
STANDARD COMPLIANCE							
Safety		UL1741, UL1741 SA	, UL1741 PCS, UL16	99B, UL1998, UL954	40, CSA 22.2		
Grid Connection Standards			IEEE1547, Rul	e 21, Rule 14H			
Emissions			FCC part	15 class B			
INSTALLATION SPECIFICATIONS							
AC Output and EV AC Output Conduit Size / AWG Range			1" maximum	/ 14-4 AWG			
DC Input (PV and Battery) Conduit Size / AWG Range			1'' maximum	/ 14-6 AWG			
				17.7 x 14.6 x 6.8 /			
Dimensions with Connection Unit (H x W x D)	17.7 × 1	4.6 x 6.8 / 450 x 37	0 v 174	450 x 370 x 174 17.7 x 14.6 x 6.8 /	177x146x68/	450 x 370 x 174	in/mm
	0.2 × 1	4.0 x 0.07 450 x 57	0 x 11 4	450 x 370 x 174*	00 00 5 00A; Up to 3 inverters ergy Net (optional) t for local connection 0690.12		
Michaelan da Constantina Hala		26 / 11.8		26 / 11.8	20.27	12 7	11- (1
Weight with Connection Unit				30.2 / 13.7*	30.27	13.7	lb / kg
	< 25	< 25	< 25		< 50		dBA
Noise		1	Natural C	onvection			
Noise			-40 to +140 / -40 to +60 ⁽¹⁰⁾				
				-40 to +60(10)			°F/°C

* Supported with PN SExxxxH-USMNkxxxxx or SExxxxH-USMNkxxxxx (1) These specifications apply to inverters with part numbers SExxxxH-USSNxxxxx or SExxxxH-USSNxxxxx and connection unit model number DCD-IPIH-US-PuH-F-(2) For other regional settings please contract Selardge support (3) Not designed for standalore applications and requires AC for commissioning Backup functionality is only supported for 240V grid (4) Rated AC power in Backup Operation are valid for installations with multiple inverters. For a single backup inverter operation, rated AC power in Backup is 90% (5) Algebre current source may be used, the inverter will limit its input current to the values stated

HOME BACKUP



(26) HY-DH108P8-400B (1) SOLAREDGE ENERGYHUB SE10000H-US (1) SE ENERGYBANK 10K 10.400 kW DC SYSTEM SIZE 10.000 kW AC SYSTEM SIZE

LAT:35.339800, LON:-78.652052 TSP152526

SPIVEY, STEPHEN RESIDENCE

131 EDNA JOHN COURT, DUNN, NC, 28334

SE3000H-US / SE3800H-US / SE6000H-US / SE7600H-US / SE10000H-US / SE11400H-US⁽¹⁾

RoHS

DATE: 3/20/2023 REV: A DRAWN BY: JS

EQUIPMENT **SPECIFICATIONS** PV 10

Backup Interface for North America

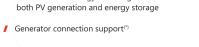
BI-EUSGN-01 / BI-NUSGN-01



Backup Interface for Flexible Backup

- Automatically provides backup power to home loads in the event of grid interruption
- / Full flexibility in which loads to backup the entire home or selected loads
- Scalable solution to support higher power & higher capacity(*)

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Seamless integration with the Energy Hub Inverter with Prism Technology to manage and monitor

/ Built-in Auto Transformer and Energy

Meter for easier and faster installation



STOREDGE

 \bigtriangledown

/ Backup Interface for North America

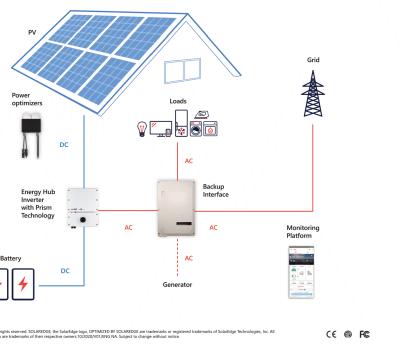
BI-EUSGN-01 / BI-NUSGN-01

	BI-EUSGN-01	BI-NUSGN-01		
INPUT FROM GRID				
AC Current Input	200		A	
C Output Voltage (Nominal)	240		Vac	
C Output Voltage Range	211 - 26	4	Vac	
AC Frequency (Nominal)	60		Hz	
AC Frequency Range	59.3 - 60	.5	Hz	
Microgrid Interconnection Device Rated Current	200		A	
Service Side AC Main Circuit Breaker Rated Current	200	N/A	A	
ervice Side AC Main Circuit Breaker Interrupt Current	10k	N/A	A	
Grid Disconnection Switchover Time	<100		ms	
OUTPUT TO MAIN DISTRIBUTION PANEL				
faximum AC Current Output	200		A	
AC L-L Output Voltage (Nominal)	240		Vac	
C L-L Output Voltage Range	211 - 26	4	Vac	
AC Frequency (Nominal)	60		Hz	
AC Frequency Range	59.3 - 60	.5	Hz	
Maximum Inverters AC Current Output in Backup Operation	78	78		
mbalance Compensation in Backup Operation	5000	5000		
AC L-N Output Voltage in Backup (Nominal)	120		V	
AC L-N Output Voltage Range in Backup	105 - 13	105 - 132		
AC Frequency Range in Backup	55 - 65	55 - 65		
INPUT FROM INVERTER				
Number of Inverter Inputs	3		#	
Rated AC Power	7,600		W	
Maximum Continuous Input Current @ 240V	32		A	
Rated AC Power in Continuous Backup Operation	6,100		W	
Maximum Continuous Input Current in Backup Operation	26		A	
Peak AC Power (<10 sec) in Backup Operation	7,000		W	
Peak AC Current (<10 sec) in Backup Operation	30		A	
nverter Input AC Circuit Breaker	40		A	
Upgradability	Up to 3 X 63.	A CB ⁽¹⁾		
GENERATOR ⁽²⁾				
Maximum Rated AC Power	15,000		W	
Maximum Continuous Input Current	63		Adc	
Dry Contact Switch Voltage Rating	250/30		Vac/Vd	
Dry Contact Switch Current Rating	5		A	
2-wire Start Switch	Yes			
ADDITIONAL FEATURES				
nstallation Type	Suitable for use as service equipment	For main lug only		
Number of Communication Inputs	2			
Communication	RS485			
Energy Meter (for Import/Export)	1% accura	icy		
Manual Control Over Microgrid Interconnection Device	Yes			

/ Backup Interface for North America

BI-EUSGN-01 / BI-NUSGN-01

	BI-EUSGN-01	BI-NUSGN-01		
STANDARD COMPLIANCE				
Color.	UL1741, CSA	22.2 NO. 107		
Safety	UL869A	N/A		
Emissions	FCC part 15 class B			
INSTALLATION SPECIFICATIONS				
Supported Inverters	StorEdge single phase inverter, Single phase Energy Hub inverter with Prism technology			
AC From Grid Conduit Size / AWG Range	2" conduits / #0 - 4/0 AWG			
AC Inverter Conduit Size / AWG Range	1" conduit / 14 - 4 AWG			
AC Generator Input Conduit Size / AWG Range	1" conduit / 8 - 3 AWG			
Communication Conduit Size / AWG Range	3/4" / 24	- 10 AWG		
Weight	73.	/ 33	lb / K	
Cooling	Fan (user n	eplaceable)		
Noise	<	50	dBA	
Operating Temeprature Range	-40 to +122	/ -40 to +50	°F/*	
Protection Rating	NEMA	3R, IP44		
Dimensions (HxWxD)	20.59 x 13.88 x 8.62	/ 523.5 x 352.5 x 219	in / m	

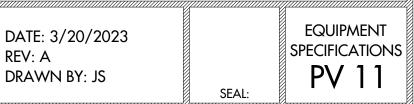






SPIVEY, STEPHEN RESIDENCE 131 EDNA JOHN COURT, DUNN, NC, 28334 LAT:35.339800, LON:-78.652052 TSP152526

(26) HY-DH108P8-400B (1) SOLAREDGE ENERGYHUB SE10000H-US (1) SE ENERGYBANK 10K 10.400 kW DC SYSTEM SIZE 10.000 kW AC SYSTEM SIZE



Power Optimizer

For Residential Installations

S440 / S500 / S500B



POWER OPTIMIZER

Enabling PV power optimization at the module level

- Specifically designed to work with SolarEdge residential inverters
- Detects abnormal PV connector behavior, preventing potential safety issues*
- Module-level voltage shutdown for installer and firefighter safety
- Superior efficiency (99.5%)

Functionality subject to inverter model and firmware versi

- Mitigates all types of module mismatch loss, from 1 manufacturing tolerance to partial shading
- Faster installations with simplified cable management and easy assembly using a single bolt
- Flexible system design for maximum space utilization
- Compatible with bifacial PV modules

/ Power Optimizer For Residential Installations S440 / S500 / S500B

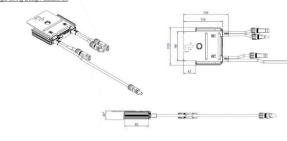
	S440	S500	S500B	UNI
INPUT				
Rated Input DC Power(1)	440		500	W
Absolute Maximum Input Voltage (Voc)	60)	125	Vdc
MPPT Operating Range	8 -	60	12.5 - 105	Vdc
Maximum Short Circuit Current (Isc) of Connected PV Module	14.5		15	Adc
Maximum Efficiency		99.5		%
Weighted Efficiency		98.6		%
Overvoltage Category				
OUTPUT DURING OPERTION				
Maximum Output Current	15		Adc	
Maximum Output Voltage	60 80		Vdc	
OUTPUT DURING STANDBY (POWER OPTIMIZER D	ISCONNECTED FROM	INVERTER OR INVER	TER OFF)	
Safety Output Voltage per Power Optimizer	0.7	1 ± 0.1		Vdc
STANDARD COMPLIANCE ⁽²⁾				
EMC	FCC Part 15 Class	B, IEC61000-6-2, IEC61000-6-3	CISPR11, EN-55011	
Safety		C62109-1 (class II safety), UL17	41	
Material		UL94 V-0, UV Resistant		
RoHS		Yes		
Fire Safety		VDE-AR-E 2100-712:2018-12		
INSTALLATION SPECIFICATIONS				
Maximum Allowed System Voltage		1000		Vdc
Dimensions (W x L x H)	129 x 15	5 x 30	129 x 155 x 45	mm
Weight (including cables)		655		gr
Input Connector		MC4 ⁽³⁾		
Input Wire Length		0.1		m
Output Connector		MC4		
Output Wire Length		(+) 2.3, (-) 0.10		m
Operating Temperature Range ⁽⁴⁾		-40 to +85		°C
Protection Rating		IP68		
Relative Humidity		0 - 100		%

For details about CE compliance, see <u>Declaration of Conformity – CE</u>.
 For other connector types please contact SolarEdge.

(3) For other connector types please contact SolarEdge.
(4) For ambient temperatures above +70°C power de-rating is applied. Refer to <u>Power Optimizers Temperature De-Rating Technical Note</u> for details

PV System Design Usi Inverter ⁽⁵⁾	ng a SolarEdge	SolarEdge Home Wave Inverter Single Phase	SolarEdge Home Short String Inverter Three Phase	Three Phase for 230/400V Grid	Three Phase for 277/480V Grid	
Minimum String Length	S440, S500	8	9	16	18	
(Power Optimizers)	S500B	6	8	14		
Maximum String Length (Po	ower Optimizers)	25	20	50		
Maximum Continuous Pow	er per String	5700	5625	11250	12750	W
Maximum Allowed Connec (Permitted only when the powe is less than 2,000W)		See ⁽⁶⁾	See ⁽⁶⁾	13500	15000	w
Parallel Strings of Different	Lengths or Orientations		Ye	s		

(5) It is not allowed to mix S-series and P-series Power Optimizers in new installations.
 (6) If the inverter's rated AC power ≤ maximum nominal power per string, then the maximum Refer to <u>Application Note: Single String Design Guidelines</u>.



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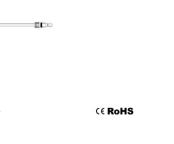


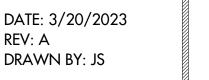
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(26) HY-DH108P8-400B (1) SOLAREDGE ENERGYHUB SE10000H-US (1) SE ENERGYBANK 10K 10.400 kW DC SYSTEM SIZE 10.000 kW AC SYSTEM SIZE











390-410W

108 HALF-CELL BIFACIAL MODULE

HY-DH108P8

Hyperion Performance

CE

warranty for extra

linear power output

12/22

BLACK DH108P8

Engineering Drawing

30±1 (1.18±0.04)

33 (1.30) A-A Frame Section

Operating Parameters

Mechanical Parameters

Solar Cell

No. of Cells

Dimensions

Weight

Junction Box

Output Cables

Connector

Front Cover

Back Cover

Container

D	
Max. System Voltage	DC 1500V (IEC/UL)
Operating Temperature	-40°C ~ +85°C (-40°F ~ +185°F)
Max. Fuse Rating	30A
Frontside Max. Loading	5400Pa (112lb/ft²)
Backside Max. Loading	2400Pa (50lb/ft²)
Bifaciality	70%±10%
Fire Resistance	IEC Class A, UL Type 29

Mono PERC 182mm

1722 × 1134 × 30mm

25.2kg (55.55lbs)

EVO2 or customized

(67.08 × 44.65 × 1.18in.)

IP68 rated (3 bypass diodes) 4mm² (IEC),12 AWG(UL)

(-/+)1200mm (47.24in.) or custor

36 pcs/Pallet, 792 pcs/40' HC

2.0mm (0.079in.) semi-tempered AR glass

2.0mm (0.079in.) semi-tempered glass

108 (6 × 18)

Electrical Characteristics - STC	Irradiance 1000 W/m², ar	nbient temperature 25 °C	C, AM1.5.			
Maximum Power at STC (Pmax/W)	410	405	400	395	390	
Power Tolerance (W)			0 ~ +5			
Optimum Operating Voltage (Vmp/V)	31.45	31.21	31.01	30.84	30.64	
Optimum Operating Current (Imp/A)	13.04	12.98	12.90	12.81	12.73	
Open Circuit Voltage (Voc/V)	37.32	37.23	37.07	36.98	36.85	
Short Circuit Current (Isc/A)	13.95	13.87	13.79	13.70	13.61	
Module Efficiency	21.0%	20.7%	20.5%	20.2%	20.0%	
Electrical Characteristics - NMOT	Irradiance 800 W/m², a	mbient temperature 20 °	C, AM1.5, wind speed 1	m/s.		
Maximum Power at NMOT (Pmax/W)	310.2	306.4	302.5	298.8	295.0	
	20.02	20.60	20.41	20.25	20.15	

Electrical Characteristics - NMOT	Irradiance 800 W/m², am	bient temperature 20 °	°C, AM1.5, wind speed 1 r	n/s.		
Maximum Power at NMOT (Pmax/W)	310.2	306.4	302.5	298.8	295.0	
Optimum Operating Voltage (Vmp/V)	29.82	29.60	29.41	29.25	29.15	
Optimum Operating Current (Imp/A)	10.40	10.35	10.29	10.22	10.15	
Open Circuit Voltage (Voc/V)	35.39	35.31	35.15	35.07	34.95	
Short Circuit Current (Isc/A)	11.25	11.19	11.13	11.05	10.98	0

Rearside Power Gain (Reference to 410W Front)

Rearside Power Gain	5%	15%	25%
Maximum Power (Pmax/W)	431.4	472.3	514.8
Optimum Operating Voltage (Vmp/V)	31.57	31.57	31.65
Optimum Operating Current (Imp/A)	13.66	14.96	16.27
Open Circuit Voltage (Voc/V)	37.46	37.46	37.46
Short Circuit Current (Isc/A)	14.57	15.96	17.35
Module Efficiency	22.1%	24.2%	26.4%

Temperature Characteristics

Nominal Module Operating Temperature	42 ± 2 °C
Nominal Cell Operating Temperature	∕ 45 ± 2 °C
Temperature Coefficient of Pmax	-0.35%/°C
Temperature Coefficient of Voc	-0.27%/°C
Temperature Coefficient of Isc	0.05%/°C



SPIVEY, STEPHEN RESIDENCE 131 EDNA JOHN COURT, DUNN, NC, 28334 LAT:35.339800, LON:-78.652052 TSP152526

Conventional Module

varranty for materials

nd workmanship

TÜVRheinland CERTIFIED

IEC61215 / IEC61730 / UL61730 IEC61701 / IEC62716

ISO9001: Quality Management System

25

ŒD.

(26) HY-DH108P8-400B (1) SOLAREDGE ENERGYHUB SE10000H-US (1) SE ENERGYBANK 10K 10.400 kW DC SYSTEM SIZE 10.000 kW AC SYSTEM SIZE

HIGH CONVERSION EFFICIENCY Module efficiency up to 21.0% through advanced cell technology

EXCELLENT WEAK LIGHT PERFORMANCE

More power output in weak light condition, such as cloudy days, morning and sunset

and manufacturing process

TITAN SOLAR POWER

INFO@TITANSOLARPOWER TITANSOLARPOWER.COM

525 W BASELINE RD

TEL 855 SAY-SOLAR

MESA, AZ 85210

EXTENDED MECHANICAL PERFORMANCE

0 Module certified to withstand extreme wind (2400 Pa) and PA snow loading (5400 Pa)

QUALITY GUARANTEE



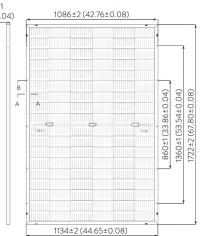
High module quality ensures long-term reliability

INFO@HYPERION-USA.COM 7/559 MOO.6, MAPYANGPHON SUBDISTRICT, PLUAK DAENG DISTRICT, RAYONG PROVINCE, 21140, THAILAND

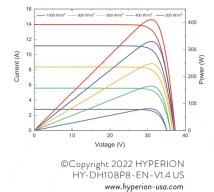
HY-DH108P8-390/410B

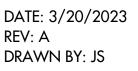


Unit: mm (inch)

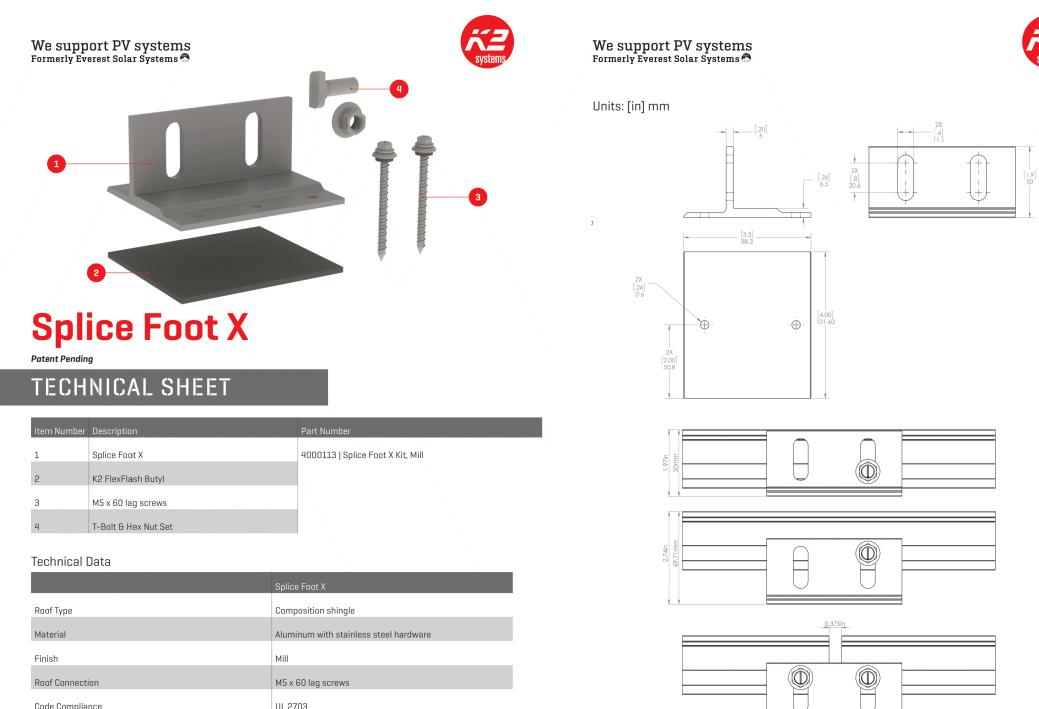












Code Compliance Compatibility



SPIVEY, STEPHEN RESIDENCE 131 EDNA JOHN COURT, DUNN, NC, 28334 LAT:35.339800, LON:-78.652052 TSP152526

CrossRail 44-X, 48-X, 48-XL, 80

k2-systems.com

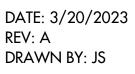
UL 2703

(26) HY-DH108P8-400B (1) SOLAREDGE ENERGYHUB SE10000H-US (1) SE ENERGYBANK 10K 10.400 kW DC SYSTEM SIZE 10.000 kW AC SYSTEM SIZE



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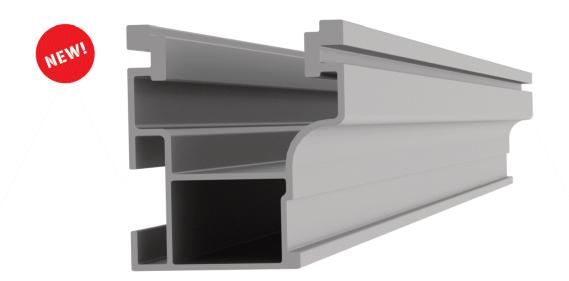






Mounting systems for solar technology

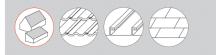




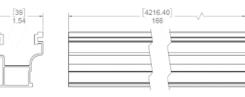
NEW PRODUCT

CrossRail 44-X

- Optimized rail profile
- One rail for all markets
- Built-in wire management
- Maintains same structural integrity as 48-X
- Tested up to 200 mph winds
- Tested up to 100 PSF snow loads



Part Number	Description
4000019	CrossRail 44-X 166'', Mill
4000020	CrossRail 44-X 166'', Dark
4000021	CrossRail 44-X 180", Mill
4000022	CrossRail 44-X 180", Dark
4000051	RailConn Set, CR 44-X, Mill
4000052	RailConn Set, CR 44-X, Dark
4000067	End Cap, Black, CR 44-X



www.everest-solarsystems.com

CrossRail 44-X Product Sheet US01 | 0520 · Subject to change · Product illustrations are exemplary and may differ from the original.



SPIVEY, STEPHEN RESIDENCE 131 EDNA JOHN COURT , DUNN, NC, 28334 LAT:35.339800, LON:-78.652052 TSP152526 (26) HY-DH108P8-400B (1) SOLAREDGE ENERGYHUB SE10000H-US (1) SE ENERGYBANK 10K 10.400 kW DC SYSTEM SIZE 10.000 kW AC SYSTEM SIZE

ATE: 3/20/2023				
EV: A				
rawn by: JS				



solar<mark>edge</mark>

Recommended OCPD Size per Grid

Inverter	Maximum Output Current (A)	Minimum Fuse Rating (A)	Maximum Fuse Rating (A)
SE3000H-US	12.5	20	50
SE3800H-US	16	20	50
	24 @ 208V	20	50
SE5000H-US	21 @ 240V	30	50
SE6000H-US	24 @ 208V	30 @ 208V	50
	25 @ 240V	35 @ 240V	50
SE7600H-US	32	40	50
SE10000H-US	42	60	80
SE11400H-US	48.5 @ 208V	70 @ 208V	80
	47.5 @ 240V	60 @ 240V	00

SolarEdge Single Phase Inverter with HD-Wave Technology Installation MAN-01-00541-1.1



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(26) HY-DH108P8-400B (1) SOLAREDGE ENERGYHUB SE10000H-US (1) SE ENERGYBANK 10K 10.400 kW DC SYSTEM SIZE 10.000 kW AC SYSTEM SIZE

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DATE: 3/20/2023 REV: A DRAWN BY: JS



SolarEdge Energy Bank **10kWh Battery**

	10 year warranty
solar <mark>.adge</mark>	

Optimized for SolarEdge Energy Hub inverters**

- / Maximized system performance, gaining more energy to store and use for on-grid and backup power applications
- Integrates with the complete SolarEdge residential offering, providing a single point of contact for warranty, support, training, and simplified logistics & operations
- / DC coupled Li-ion battery featuring industryleading 93.3% overall system efficiency, from PV to battery to grid
- Scalable solution for increased power and capacity with multiple SolarEdge inverters and batteries

solaredge.com

- Solar, storage, EV charging, and smart devices all monitored and managed by a single app to optimize solar production, consumption and backup power
- Wireless communication to the inverter, reducing wiring, labor and risk of installation faults
- **/** Simple plug and play installation, with automatic SetApp-based configuration using predefined profiles
- Includes multiple safety features for battery protection at all times



STORAGE

/ SolarEdge Energy Bank

BATTERY SPECIFICATION		
Usable Energy	9800 (100% depth of discharge)	Wh
Continuous Output Power	5000	W
Peak Output Power	7500 (for 10 seconds)	W
Peak Roundtrip Efficiency	>94.5	%
Warranty ⁽¹⁾	10	Years
Voltage Range	350-450	Vdc
Communication Interfaces	Wireless / RS485	
Batteries per inverter	Up to 3	
STANDARD COMPLIANCE		
Certificate	UL1642, UL1973, UL9540, UL9540A, UN38.3	
Emissions	FCC Part 15 Class B	
MECHANICAL SPECIFICATIONS		
Dimensions (W x H x D)	31.1 x 46.4 x 9.84 / 790 x 1179 x 250	in / mm
Weight	238 / 108	lb / kg
Mounting	Wall mount or floor mount ⁽²⁾	
Operating Temperature	+14 to +122 / -10 to +50	°F/°C
Storage Temperature	-22 to + 140 /-30 to +60	°F/°C
Altitude	9842 / 3000	ft / m
Enclosure Protection	IP65 / NEMA 3R - indoor and outdoor (water and dust protection)	
Cooling	Natural convection	
Noise	<25	dBA

(2) Floor mount shand is predicted to the transmitted
 (2) Floor mount shand is purchased separately
 * The specifications included in this document are preliminary and subject to change
 ** Please refer to SolarEdge battery compatible inverters app note



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CE RoHS

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ATE: 3/20/2023		EQUIPMENT
EV: A		SPECIFICATIONS
RAWN BY: JS		PV 17
	SEAL:	