ITEM OPPORTUNITY SYNOPSIS					
Scouting Number:	2024-022				
Name of the item to be scouted:	Solar Inverter Optimizer				
State item to be used in:	New Hampshire				
Describe the Item:					
Please describe the item application/the end use of the item.	Solar module level Inverter optimizer				
Supplier Information:					
Type of Supplier Being Sought (select from the list below):					
Manufacturer	Х				
Contract Manufacturer					
Distributor					
Other (Please Specify)					
Reason for Scouting Submission (select from the list below)					
2nd Supplier					
Price Po Share					
Re-Shore					
Past supplier no longer available					
New Product Startup  BABA					
Other (Please Specify)	X				
Summary of Technical Specifications and Performance Requirements:					
Describe the manufacturing processes (elaborate to provide as much detail as possible)	Electric/Electronics Assembly				
Provide dimensions / size / tolerances / performance specifications of the item	note sample data sheet with this submission				
List required materials needed to make the product, including materials of product components, if applicable	note sample data sheet with this submission				
Are there applicable certification requirements?	1				
Yes					
No .	X				
Please explain:					
Are there any applicable regulations that apply to the production of this item?	1				
Yes	X				
No .	DADA				
Please explain:	BABA				
Are there any other standards / requirements?					
Yes					
No	X				
Please explain:					
Additional Comments:					
Additional technical comments:					
Volume and Pricing:					
Estimated Potential Business Volume (i.e. #units per day, month, year):	3000 a year				
Estimated Target Price/Unit Cost Information:	\$85ea				
Delivery Requirements:					
When is it needed by? (Immediate, 30 days, 6 months, etc.)	120 days				
Describe packaging requirements (i.e. individually/group packaging, etc.)	Palletized				
Where will this item be shipped?	Brentwood NH				
Additional Comments:					
Is there other information you would like to include?					

# **Power Optimizer**

P605 / P650 / P701 / P730 / P800p / P801 / P850 / P950 / P1100





# POWER OPTIMIZER

# PV power optimization at the module level The most cost-effective solution for commercial and large field installations

- Specifically designed to work with SolarEdge inverters
- High efficiency with module-level MPPT, for maximized system energy production and revenue, and fast project ROI
- Superior efficiency (99.5%)
- Balance of System cost reduction; 50% less cables, fuses, and combiner boxes, and over 2x longer string lengths possible

- Fast installation with a single bolt
- Advanced maintenance with module level monitoring
- Module level voltage shutdown for installer and firefighter safety
- Use with two PV modules connected in series or in parallel



# / Power Optimizer

### P605 / P650 / P701 / P730 / P801

Power Optimizer Module (Typical Module Compatibility)	P605 (for 1 x high power PV module)	P650 (for up to 2 x 60-cell PV modules)	P701 (for up to 2 x 60/120-cell PV modules)	P730 (for up to 2 x 72-cell PV modules)	P801 (for up to 2 x 72/144 cell PV modules)			
INPUT						·		
Rated Input DC Power <sup>(1)</sup>	605	650	700*	730**	800	W		
Connection Method		Single inpu	ut for series connected	modules	•			
Absolute Maximum Input Voltage (Voc at lowest temperature)	65	G	96	1:	25	Vdc		
MPPT Operating Range	12.5 - 65	12.5	- 80	12.5	<b>- 105</b>	Vdc		
Maximum Short Circuit Current per Input (Isc)	14.1	11	11.75	11**	12.5***	Adc		
Maximum Efficiency			99.5			%		
Weighted Efficiency			98.6			%		
Overvoltage Capacity			II					
OUTPUT DURING OPERATION (POWER O	PTIMIZER CONNECTED	TO OPERATING S	OLAREDGE INVER	RTER				
Maximum Output Current			15			Adc		
Maximum Output Voltage		80						
OUTPUT DURING STANDBY (POWER OPT	IMIZER DISCONNECTE	D FROM SOLARED	GE INVERTER OR	SOLAREDGE INVE	RTER OFF			
Safety Output Voltage per Power Optimizer			1 ± 0.1			Vdc		
STANDARD COMPLIANCE								
EMC		FCC Part 15 C	lass B, IEC61000-6-2, IE	EC61000-6-3				
Safety			C62109-1 (class II safety					
RoHS			Yes					
Fire Safety		VD	E-AR-E2100-712:2013-(	05				
INSTALLATION SPECIFICATIONS	-							
Compatible SolarEdge Inverters		Three F	hase Inverter SE16K &	larger				
Maximum Allowed System Voltage			1000			Vdc		
Dimensions (W x L x H)	129 x 153 x 52 / 5.1 x 6 x 2	129 x 153 x 42.5 / 5.1 x 6 x 1.7		129 x 153 x 49.5 / 5.1 x 6 x 1.9		mm / in		
Weight	1064 / 2.3	834	/ 1.8	933 / 2.1		gr / lb		
Input Connector			MC4 <sup>(2)</sup>					
Input Wire Length		0.16 / 0.52						
Output Connector		MC4						
Output Wire Length	Portrait Orientation: 1.4 / 4.5	Portrait Orientation: 1.2 / 3.9	-	Portrait Orien	tation: 1.2 / 3.9	m / ft		
	- Landscape Orientation: 1.8 / 5.9 Landscape Orientation: 2.2 / 7.2							
Operating Temperature Range <sup>(6)</sup>		-40 to +85 / -40 to +185						
Protection Rating	IP68 / NEMA6P							
Relative Humidity		0 – 100						

<sup>\*</sup> For P701 models manufactured after work week 06/2020, the rated DC input is 740W.

<sup>(4)</sup> For ambient temperatures above +70°C / +158°F, power de-rating is applied. Refer to Power Optimizers Temperature De-Rating Technical Note for more details.

PV System Design Using a SolarEdge Inverter <sup>(5)(6)(7)(8)</sup> Compatible Power Optimizers		230/400V Grid SE16K, SE17 SE25K*, SE33.3K*		230/400V Grid SE27.6K*		230/400V Grid SE30K*		277/480V Grid SE33.3K*, SE40K*		
		P605	P650, P701, P730, P801	P605	P650, P701, P730, P801	P605	P650, P701, P730, P801	P605	P650, P701, P730, P801	
Minimum String	Power Optimizers	14	14	14	14	15	15	14	14	
Length	PV Modules	14	27	14	27	15	29	14	27	
Waxii Tarii String	Power Optimizers	30	30	30	30	30	30	30	30	
	PV Modules	30	60	30	60	30	60	30	60	
Maximum Continuous Power per String		11250		11625		12750		12750		W
	onnected Power per String <sup>(8)</sup> e difference in connected power V or less)	1350		13500		15000		15000		W
Parallel Strings of Dif	ferent Lengths or Orientations		Yes							
	in Number of Power Optimizers Allowed t and Longest String Connected to the	5 Power Optimizers								

<sup>\*</sup> The same rules apply for Synergy units of equivalent power ratings that are part of the modular Synergy Technology Inverter.

<sup>\*\*</sup> For P730 models manufactured after work week 06/2020, the rated DC input is 760W and the maximum Isc per input is 11.75A.

<sup>\*\*\*</sup> For P801 models manufactured in work week 40/2020 or earlier, the maximum lsc per input in 11.75A.

<sup>(1)</sup> The rated power of the module at STC will not exceed the Power Optimizer "Rated Input DC Power". Modules with up to +5% power tolerance are allowed.

<sup>(2)</sup> For other connector types, please contact SolarEdge.

 $<sup>(3) \</sup> Longer input wire lengths are available for use with split junction box modules. For 0.9m/2.95ft order P730-xxxLxxx.$ 

<sup>(5)</sup> P650/P701/P730/P801 can be mixed in one string only with P650/P701/P730/P801. P605 cannot be mixed with any other Power Optimizer in the same string.

<sup>(6)</sup> For each string, a Power Optimizer may be connected to a single PV module if 1) each Power Optimizer is connected to a single PV module or 2) it is the only Power Optimizer connected to a single PV module in the string.

(7) For SE16K and above, the minimum STC DC connected power should be 11KW.

<sup>(8)</sup> To connect more STC power per string, design your project using <u>SolarEdge Designer</u>.

# / Power Optimizer

### P800p / P850 / P950 / P1100

Corr up to 2 x 96-   cell 5" PV modules   power or pi-facial modules   power po		P800p	P850	P1100				
Rated Input DC Power <sup>®</sup> 800         850         950         1100         W           Connection Method         Dual input for independently connected occinected occinected occinected occinected occinected occinected occinected in the product of the product of the product of the product occinected occinect		(for up to 2 x 96-	power or bi-facial	high power or bi-	power or bi-facial	Unit		
Dual input for independently connected   Single input for series connected modules	INPUT	<u>'</u>						
Connected   Connected   Connected   Single input for series connected   Voc Absolute Maximum Input Voltage   83   125   Voc At lowest temperature   83   125   Voc Absolute Maximum Short Circuit Current per Input (8c)   7   14.1   12.5   105   14.1   Add Maximum Efficiency   12.5   30   12.5   105   14.1   Add Maximum Efficiency   99.5   14.1   Add Maximum Output Current   18   Add Maximum Output Current   18   Add Maximum Output Voltage   19.0   Add Maximum Efficiency   19.0   Add Maximum Allowed System Voltage   19.0   Add Maximum Allowed System Voltage   129 x 168 x 59 / 5.1 x 6.6 t x 2.3   Add Maximum Allowed System Voltage   129 x 168 x 59 / 5.1 x 6.6 t x 2.3   Add Maximum Allowed System Voltage   19.0   Add Maximum Efficiency   19.0   Add Maximum Eff	Rated Input DC Power <sup>(1)</sup>	800	850	950	1100	W		
Absolute Maximum Input Voltage   83   125   50   70   141   125   105   70   70   141   125   105   70   70   70   70   70   70   70	Connection Method		Single	input for series connected m	nodules			
Maximum Short Circuit Current per input (isc)         7         14.1*         14.1         Add           Maximum Efficiency         99.5         %           Veelighted Efficiency         98.6         %           Overvoltage Capacity         II         II           OUTPUT DURING OPERATION (POWER OPTIMIZER CONNECTED TO OPERATING SOLAREDGE INVERTER           Maximum Output Uvroltage         80         Add           Maximum Output Voltage         80         Vod           OUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM SOLAREDGE INVERTER OR SOLAREDGE INVERTER OFF           Safety Output Voltage per Power Optimize         1 ± 0.1         Vod           STANDARD COMPLIANCE           EMC         FCC Part 15 Class B, IEC61000-6-2, IEC61000-6-3         Vod           Safety         IEC629-1 (class II safety)         IEC629-1 (class II safety)         Vod           Fire Safety         Three Phase Inverter SE16K & larger         Three Phase Inverter SE16K & larger         SE25K & larger           Waximum Allowed System Voltage         129 x 168 x 59 /         129 x 168 x 59 /         Three Phase Inverter SE16K & larger         SE25K & larger         Vdc           Dimensions (W x L x H)         129 x 168 x 59 /         129 x 162 x 59 / 5.1 x 6.4 x 2.3         mr/         mr/ </td <td>1 3</td> <td></td> <td></td> <td>125</td> <td></td> <td>Vdc</td>	1 3			125		Vdc		
Maximum Efficiency         99.5         %           Welghted Efficiency         98.6         %           Outrput During Operation (POWER OPTIMIZER CONNECTED TO OPERATING SOLAREDGE INVERTER)         Welghted Efficiency         Add.           Maximum Output Current         18         Add.           Maximum Output Voltage         80         0         Voltage Test Solare Solare Solare December 10 Verters OFTE Solare Solare December 10 Verters OFTE Solare Solare December 10 Verters OFTE Solare Solare Solare December 10 Verters OFTE Solare Solar	MPPT Operating Range	12.5 - 83		12.5 – 105		Vdc		
Weighted Efficiency         98.6         98.6         98.6         98.6         98.6         98.6         98.6         98.6         98.6         98.6         98.6         98.6         98.6         98.6         98.6         98.6         98.6         99.7         99.7         99.7         99.6         9	Maximum Short Circuit Current per Input (Isc)	7	14.1	k	14.1	Adc		
Overvoltage Capacity         Image: colspan="3">Image: colspan="3" Image: colspan="3">Image: colspan="3" Image: colspan=	Maximum Efficiency		99	9.5		%		
OUTPUT DURING OPERATION (POWER OPTIMIZER CONNECTED TO OPERATING SOLAREDGE INVERTER)           Maximum Output Current         18         Adc         Adc           Maximum Output Current         80         Vdc	Weighted Efficiency		98	3.6		%		
Maximum Output Current         18         Add           Maximum Output Voltage         0 Total         70 Voltage         70 Voltage         70 Voltage         70 Voltage         70 Voltage         70 Voltage         70 Voltage per Power Optimizer         1 ± 0.1         70 Voltage per Power Optimizer         70 Voltage per Power Optimizer         70 Voltage per Power Optimizer         70 Voltage	Overvoltage Capacity			II				
Maximum Output Voltage         80         Vdc           CUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM SOLAREDGE INVERTER OR SOLAREDGE INVERTER OFF           Safety Output Voltage per Power Optimizer         1 ± 0.1         vdc           STANDARD COMPLIANCE           EMC         FCC Part 15 Class B, IEC61000-6-2, IEC61000-6-3         SEC61000-6-3         SEC61000-6-2-IEC61000-6-3         SEC61000-6-3         SEC61000-6-3         SEC61000-6-3         SEC61000-6-3         SEC61000-6-3         SEC51000-7012003-70         SEC51000-7012003-70	<b>OUTPUT DURING OPERATION (POWE</b>	R OPTIMIZER CONNEC	TED TO OPERATING SOLA	REDGE INVERTER				
OUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM SOLAREDGE INVERTER OR SOLAREDGE INVERTER OFF           Safety Output Voltage per Power Optimizer         1 ± 0.1         Vdc           Safety Output Voltage per Power Optimizer         FCC Part 15 Class B, IEC61000-6-2, IEC61000-6-3         Safety Over Season of Part S	Maximum Output Current		1	18		Adc		
Safety Output Voltage per Power Optimizer         1 ± 0.1	Maximum Output Voltage		8	30		Vdc		
STANDARD COMPLIANCE           EMC         FCC Part 15 Class B, IEC61000-6-2, IEC61000-6-3           Safety         IEC62109-1 (class II safety)           ROHS         Yes           Fire Safety         VDE-AR-E2100-712:2013-05           INSTALLATION SPECIFICATIONS           Compatible SolarEdge Inverters         Three Phase Inverter SE16K & larger         Three Phase Inverter SE25K & larger           Maximum Allowed System Voltage         1000         Vdc           Dimensions (W x L x H)         129 x 168 x 59 / 51 x 6.61 x 2.32         129 x 162 x 59 / 51 x 6.4 x 2.32         mm /           Weight         1064 / 2.3         gr / It           Input Connector         MC4 <sup>22</sup> 1.6 / 0.52, 1.3 / 4.26, 1.6 / 5.24 <sup>(8)</sup> 0.16 / 0.52, 1.3 / 4.26, 1.6 / 5.24 <sup>(8)</sup> 0.16 / 0.52, 1.3 / 4.26, 1.6 / 5.24 <sup>(8)</sup> 0.16 / 0.52, 1.3 / 4.26, 1.6 / 5.24 <sup>(8)</sup> m / ft           Output Wire Length         0.16 / 0.52         1.3 / 4.26, 1.6 / 5.24 <sup>(8)</sup> 1.6 / 5.24 <sup>(8)</sup> 0.16 / 0.52, 1.3 / 4.26, 1.6 / 5.24 <sup>(8)</sup> m / ft           Output Wire Length         1.2 / 3.9         1.2 / 3.9         2.4 / 7.8         m / ft           Output Wire Length         1.8 / 5.9         1.2 / 4.0 to +85 / -40 to +85 / -40 to +85 / -40 to +185         °C / °           Operating Temperature Range <sup>(4)</sup>	<b>OUTPUT DURING STANDBY (POWER</b>	OPTIMIZER DISCONNE	CTED FROM SOLAREDGE II	NVERTER OR SOLAREDO	GE INVERTER OFF			
EMC         FCC Part 15 Class B, IEC61000-6-2, IEC61000-6-3           Safety         IEC62109-1 (class II safety)           RoHS         Yes           Fire Safety         VDE-AR-E2100-712:2013-05           INSTALLATION SPECIFICATIONS           Compatible SolarEdge Inverters         Three Phase Inverter SE16K & larger         Three Phase Inverter SE26K & larger           Maximum Allowed System Voltage         Three Phase Inverter SE16K & larger         Vdc           Dimensions (W x L x H)         129 x 168 x 59 / 5.1 x 6.4 x 2.32         mm / mm / mm / mm / mm           Weight         1064 / 2.3         gr / lit           Input Wire Length         0.16 / 0.52         0.16 / 0.52, 0.9 / 2.95, 1.3 / 4.26, 1.6 / 5.24(3)         0.16 / 0.52, 1.3 / 4.26(3)         0.16 / 0.52, 1.3 / 4.26(3)         0.16 / 0.52, 1.3 / 4.26(3)         0.16 / 0.52, 1.3 / 4.26(3)         0.16 / 0.52, 1.3 / 4.26(3)         0.16 / 0.52, 1.3 / 4.26(3)         0.16 / 0.52, 1.3 / 4.26(3)         0.16 / 0.52, 1.3 / 4.26(3)         0.16 / 0.52, 1.3 / 4.26(3)         0.16 / 0.52, 1.3 / 4.26(3)         0.16 / 0.52, 1.3 / 4.26(3)         0.16 / 0.52, 1.3 / 4.26(3)         0.16 / 0.52, 1.3 / 4.26(3)	Safety Output Voltage per Power Optimizer	1 ± 0.1						
Safety         IEC62109-1 (class II safety)           RoHS         Yes           Fire Safety         VDE-AR-E2100-712:2013-05           INSTALLATION SPECIFICATIONS           Compatible SolarEdge Inverters         Three Phase Inverter SE16K & larger         Three Phase Inverter SE25K & larger           Maximum Allowed System Voltage         129 x 162 x 59 / 5.1 x 6.4 x 2.32         mm / vdc           Dimensions (W x L x H)         129 x 162 x 59 / 5.1 x 6.4 x 2.32         mm / vdc           Weight         1064 / 2.3         gr / lit           Input Connector         MC4 <sup>2</sup> gr / lit           Output Wire Length         0.16 / 0.52, 0.9 / 2.95, 1.3 / 4.26, 16 / 5.24 <sup>(9)</sup> 0.16 / 0.52, 1.3 / 4.26 <sup>(1)</sup> n / ft           Output Wire Length         Landscape Orientation: 1.2 / 3.9         Landscape Orientation: 2.2 / 7.2         2.4 / 7.8         m / ft           Operating Temperature Range <sup>(4)</sup> Landscape Orientation: 1.2 / 3.9         Landscape Orientation: 1.2 / 3.9         2.4 / 7.8         m / ft           Protection Rating         18 / 5.9         Landscape Orientation: 2.2 / 7.2 <t< td=""><td>STANDARD COMPLIANCE</td><td></td><td></td><td></td><td></td><td></td></t<>	STANDARD COMPLIANCE							
RoHS         Yes         Yes         Fire Safety         YDE-AR-E2100-712:2013-05         YDE-AR-E2100-712:2013-05         Three Phase Inverter SE16K & Iarger         Three Phase Inverter SE16K & Iarger         Three Phase Inverter SE25K & Iarger         Ydc           Compatible SolarEdge Inverters         Three Phase Inverter SE16K & Iarger         Three Phase Inverter SE16K & Iarger         Ydc           Maximum Allowed System Voltage         129 x 168 x 59 / 5.1 x 6.4 x 2.32         Ydc         Pomm / Mcdv2 / St. x 6.4 x 2.32         mm / Mcdv2 / St. x 6.4 x 2.32         mm / Mcdv2 / St. x 6.4 x 2.32         Mm / Mcdv2 / St. x 6.4 x 2.32         Mm / Mcdv2 / St. x 6.4 x 2.32         Mm / Mcdv2 / St. x 6.4 x 2.32         Mm / Mcdv2 / St. x 6.4 x 2.32         Mm / Mcdv2 / St. x 6.4 x 2.32         Mm / Mcdv2 / St. x 6.4 x 2.32         Mm / Mcdv2 / St. x 6.4 x 2.32         Mm / Mcdv2 / St. x 6.4 x 2.32         Mm / Mcdv2 / St. x 6.4 x 2.32         Mm / Mcdv2 / St. x 6.4 x 2.32         Mm / Mcdv2 / St. x 6.4 x 2.32         Mm / Mcdv2 / St. x 6.4 x 2.32         Mm / Mcdv2 / St. x 6.4 x 2.32         Mm / Mcdv2 / St. x 6.4 x 2.32         Mm / Mcdv2 / St. x 6.4 x 2.32         Mcdv2 / St. x 6.4 x 2.32         Mcdv2 / St. x 6.4 x 2.32 <td cols<="" td=""><td>EMC</td><td></td><td>FCC Part 15 Class B, IEC</td><td>61000-6-2, IEC61000-6-3</td><td></td><td></td></td>	<td>EMC</td> <td></td> <td>FCC Part 15 Class B, IEC</td> <td>61000-6-2, IEC61000-6-3</td> <td></td> <td></td>	EMC		FCC Part 15 Class B, IEC	61000-6-2, IEC61000-6-3			
Note	Safety		IEC62109-1 (	class II safety)				
INSTALLATION SPECIFICATIONS           Compatible SolarEdge Inverters         Three Phase Inverter SE16K & larger         Three Phase Inverter SE25K & larger           Maximum Allowed System Voltage         1000	RoHS		Υ	es				
Compatible SolarEdge Inverters         Three Phase Inverter SE16K & larger         Three Phase Inverter SE25K & larger           Maximum Allowed System Voltage         1000         Vdc           Dimensions (W x L x H)         129 x 168 x 59 / 5.1 x 6.4 x 2.32         mm / Mcd / 2.3         mm / Mcd / 2.3         gr / lit           Weight         1064 / 2.3         MC4 / 2.3         gr / lit           Input Connector         MC4 / 2.3         0.16 / 0.52, 0.9 / 2.95, 1.3 / 4.26, 1.6 / 5.24(3)         0.16 / 0.52, 1.3 / 4.26(3)         0.16 / 0.52, 1.3 / 4.26(3)         m / fit           Output Connector         MC4         Portrait Orientation: 1.2 / 3.9         Landscape Orientation: 2.2 / 7.2         2.4 / 7.8         m / fit           Operating Temperature Range(4)         -40 to +85 / -40 to +185         °C/°           Protection Rating         IP68 / NEMA6P	Fire Safety		VDE-AR-E2100-712:2013-05					
Compatible SolarEdge Inverters         Three Phase Inverter SE16K & larger         SE25K & larger           Maximum Allowed System Voltage         1000         Vdc           Dimensions (W x L x H)         129 x 168 x 59 / 5.1 x 6.61 x 2.32         mm/           Weight         1064 / 2.3         gr / lt           Input Connector         MC4 <sup>(2)</sup> gr / lt           Input Wire Length         0.16 / 0.52         0.16 / 0.52, 0.9 / 2.95, 1.3 / 4.26, 1.6 / 5.24 <sup>(3)</sup> 0.16 / 0.52, 1.3 / 4.26, 1.6 / 5.24 <sup>(3)</sup> 0.16 / 0.52, 1.3 / 4.26 <sup>(3)</sup> m / ft           Output Connector         MC4         MC4         Contractor         Contractor         MC4         Contractor         Contractor         MC4         Contractor         Contractor         Contractor         MC4         Contractor	INSTALLATION SPECIFICATIONS							
Dimensions (W x L x H)         129 x 168 x 59 / 5.1 x 6.61 x 2.32         129 x 162 x 59 / 5.1 x 6.4 x 2.32         mm / mm	Compatible SolarEdge Inverters	TI	hree Phase Inverter SE16K & larg	er				
Dimensions (W x L x H)         129 x 162 x 59 / 5.1 x 6.4 x 2.32         mm/           Weight         1064 / 2.3         gr / lt           Input Connector         MC4 <sup>(2)</sup> 0.16 / 0.52, 0.9 / 2.95, 1.3 / 4.26, 1.6 / 5.24 <sup>(3)</sup> 0.16 / 0.52, 1.3 / 4.26, 1.6 / 5.24 <sup>(3)</sup> 0.16 / 0.52, 1.3 / 4.26 <sup>(3)</sup> m / ft           Output Connector         MC4	Maximum Allowed System Voltage		10	000		Vdc		
Input Connector	Dimensions (W x L x H)		129 x 162 x 59 / 5.1 x 6.4 x 2.32					
Input Wire Length	Weight	1064 / 2.3						
1.3 / 4.26, 1.6 / 5.24 (3)   1.6 / 5.24 (3)   0.16 / 0.52, 1.3 / 4.26 (3)   1.6 / 5.24 (3)   0.16 / 0.52, 1.3 / 4.26 (3)   1.6 / 5.24 (3)   0.16 / 0.52, 1.3 / 4.26 (3)   1.7 / 0.26 (3)   1.6 / 5.24 (3)   0.16 / 0.52, 1.3 / 4.26 (3)   1.7 / 0.26 (3)   1.6 / 5.24 (3)   0.16 / 0.52, 1.3 / 4.26 (3)   1.7 / 0.26 (3)   1.6 / 5.24 (3)   0.16 / 0.52, 1.3 / 4.26 (3)   1.7 / 0.26 (3)   1.6 / 5.24 (3)   0.16 / 0.52, 1.3 / 4.26 (3)   1.7 / 0.26 (3)   1.6 / 5.24 (3)   0.16 / 0.52, 1.3 / 4.26 (3)   1.7 / 0.26 (3)   1.6 / 5.24 (3)   0.16 / 0.52, 1.3 / 4.26 (3)   1.7 / 0.26	Input Connector		MC4 <sup>(2)</sup>					
Portrait Orientation: 1.2 / 3.9  Output Wire Length  Landscape Orientation: 1.2 / 3.9  Landscape Orientation: 2.2 / 7.2  Operating Temperature Range <sup>(4)</sup> Protection Rating  Portrait Orientation: 1.2 / 3.9  Landscape Orientation: 2.2 / 7.2  Landscape Orientation: 2.2 / 7.2  Protection Rating  Portrait Orientation: 1.2 / 3.9  Landscape Orientation: 2.2 / 7.2  Protection Rating	Input Wire Length	0.16 / 0.52			0.16 / 0.52, 1.3 / 4.26 <sup>(3)</sup>	m / ft		
Output Wire Length     Landscape Orientation: 1.8 / 5.9     Landscape Orientation: 2.2 / 7.2     2.4 / 7.8     m / fix       Operating Temperature Range <sup>(4)</sup> -40 to +85 / -40 to +185     °C / °       Protection Rating     IP68 / NEMA6P     °C / °	Output Connector	MC4						
Operating Temperature Range <sup>(4)</sup> Protection Rating  -40 to +85 / -40 to +185  Protection Rating  Protection Rating	Output Wire Length			2.4 / 7.8	m/ft			
Protection Rating IP68 / NEMA6P	Operating Temperature Range <sup>(4)</sup>	1.6 / 5.9	·					
	Relative Humidity	0 – 100						

<sup>\*</sup> For P850/P950 models manufactured in work week 06/2020 or earlier, the maximum Isc per input is 12.5A. The manufacture code is indicated in the Power Optimizer's serial number.

Example: S/N SJ0620A-xxxxxxxx (work week 06 in 2020)

 $\hbox{(2) For other connector types, please contact Solar Edge}.$ 

(3) Longer input wire lengths are available for use with split junction box modules.

For 0.9m/2.95ft order P801/P850-xxxLxxx. For 1.3m/2.95ft order P850/P950/P1100 -xxxXxxx. For 1.6m/5.24ft order P850/P950-xxxYxxx).

(4) For ambient temperatures above +70°C / +158°F, power de-rating is applied. Refer to Power Optimizers Temperature De-Rating Technical Note for more details.

PV System Desi Inverter <sup>(5)(6)(7)(8)</sup>	gn Using a SolarEdge	230/400V Grid SE16K, SE17K	230/400V Grid SE25K*						
Compatible Power	patible Power Untimizers   Paulin Pasil Pasil   Paulin Pasil Pasil   Paulin Pasil Pasil   Paulin Pasil					P800p, P850, P950, P1100			
Minimum String	Power Optimizers	14	14	14	15	14	14		
Length	PV Modules	27	27	27	29	27	27		
Maximum String	Power Optimizers	30	30	30	30	30	30		
Length	PV Modules	60	60	60	60	60	60		
Maximum Continuo	um Continuous Power per String 13500 13500 13950 15300 13500		15300	W					
Maximum Allowed Connected Power per String <sup>(8)</sup>		1 string – 15750	1 string – 15750	1 string – 16200	1 string – 17550	2 strings or less – 15750	2 strings or less – 17550	w	
between strings is 2	en the difference in connected power ,000W or less)	2 strings or more – 18500	2 strings or more – 18500	2 strings or more – 18950	2 strings or more – 20300	3 strings or more – 18500	3 strings or more – 20300	\v	
Parallel Strings of D	ifferent Lengths or Orientations	Yes							
	e in Number of Power Optimizers ne Shortest and Longest String ame Inverter Unit	5 Power Optimizers							

<sup>\*</sup> The same rules apply for Synergy units of equivalent power ratings that are part of the modular Synergy Technology Inverter. (5) P800p/P850/P950/P1100 can be mixed in one string only with P800p/P850/P950/P1100.

<sup>(1)</sup> The rated power of the module at STC will not exceed the Power Optimizer "Rated Input DC Power". Modules with up to +5% power tolerance are allowed.

<sup>(6)</sup> For each string, a Power Optimizer may be connected to a single PV module if 1) each Power Optimizer is connected to a single PV module or 2) it is the only Power Optimizer connected to a

<sup>(7)</sup> For SE16K and above, the minimum STC DC connected power should be 11KW.

<sup>(8)</sup> To connect more STC power per string, design your project using <u>SolarEdge Designer</u>.

SolarEdge is a global leader in smart energy technology. By leveraging world-class engineering capabilities and with a relentless focus on innovation, SolarEdge creates smart energy solutions that power our lives and drive future progress.

SolarEdge developed an intelligent inverter solution that changed the way power is harvested and managed in photovoltaic (PV) systems. The SolarEdge DC optimized inverter maximizes power generation while lowering the cost of energy produced by the PV system.

Continuing to advance smart energy, SolarEdge addresses a broad range of energy market segments through its PV, storage, EV charging, UPS, and grid services solutions.

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