

SolarEdge Power Optimizer

Module Add-On

P300 / P350 / P405 / P500



PV power optimization at the module-level

- Up to 25% more energy
- Superior efficiency (99.5%)
- Mitigates all types of modules mismatch-loss, from manufacturing tolerance to partial shading
- Flexible system design for maximum space utilization
- Fast installation with a single bolt
- Next generation maintenance with module level monitoring
- Module-level voltage shutdown for installer and firefighter safety



		P300 (for 60-cell modules)	P350 (for high-power 60-cell and for 72-cell modules)	P500 (for 96-cell modules)	P405 (for thin film modules)		
INPUT			,	I.	ı		
Rated Input DC Power ⁽¹⁾		300	350	500	405	W	
Absolute Maximum Input Vo (Voc at lowest temperature)	0	48	60	80	125	Vdc	
MPPT Operating Range		8 - 48	8 - 60	8 - 80	12.5 - 105	Vdc	
Maximum Continuous Input	Pxxx-2 series			.0		Adc	
Current (Isc)	Pxxx-5 series	10	11	1	0	Adc	
Maximum Efficiency				9.5	• • • • • • • • • • • • • • • • • • • •	%	
Weighted Efficiency			98	3.8	• • • • • • • • • • • • • • • • • • • •	%	
Overvoltage Category				 II	• • • • • • • • • • • • • • • • • • • •		
OUTPUT DURING OPERAT	ION (POWER OPTIN	MIZER CONNECTED	TO OPERATING SOL	AREDGE INVERTER)			
Maximum Output Current			1	.5		Adc	
Maximum Output Voltage			60	***************************************	85	Vdc	
OUTPUT DURING STANDB	Y (POWER OPTIMIZ	ZER DISCONNECTE	D FROM SOLAREDGE	INVERTER OR SOLAR	REDGE INVERTER OF	F)	
Safety Output Voltage per P	ower Optimizer			1		Vdc	
STANDARD COMPLIANCE							
EMC		F	CC Part15 Class B, IEC6	51000-6-2, IEC61000-6	-3		
Safety			IEC62109-1 (class	II safety), UL1741			
RoHS			Y	es			
Fire Safety			VDE-AR-E 210	0-712:2013-05			
INSTALLATION SPECIFICAT	TIONS						
Maximum Allowed System \	/oltage		10	000		Vdc	
· · · · · · · · · · · · · · · · · · ·	Pxxx-2 series		141 x 212 x 40.5 /	5.55 x 8.34 x 1.59	• • • • • • • • • • • • • • • • • • • •	mm / ir	
Dimensions (W x L x H)	Pxxx-5 series	128 x 152 x 27.	5 / 5 x 5.97 x 1.08	128 x 152 x 35 / 5 x 5.97 x 1.37	128 x 152 x 48 / 5 x 5.97 x 1.89	mm / ir	
Weight	Pxxx-2 series		950	/ 2.1		gr / lb	
(including cables)	Pxxx-5 series		770 / 1.7	•	930 / 2.05	gr / lb	
Input Connector			M	C4 ⁽²⁾	• • • • • • • • • • • • • • • • • • • •		
Output Connector				C4	• • • • • • • • • • • • • • • • • • • •		
Output Wire Length		0.95 / 3.0		1.2 / 3.9	• • • • • • • • • • • • • • • • • • • •	m/ft	
Operating Temperature Ran	ge	-40 - +85 / -40 - +185					
Protection Rating	Pxxx-2 series	IP65 / NEMA4					
Polativa Humidity	Pxxx-5 series	IP68 / NEMA6P 0 - 100					
Relative Humidity				100		%	

 $^{^{(1)}}$ Rated STC power of the module. Module of up to +5% power tolerance allowed.

⁽²⁾ For other connector types please contact SolarEdge.

PV SYSTEM DESIGN USING A SOLAREDGE INVERTER ⁽³⁾		SINGLE PHASE	THREE PHASE	
Minimum String Length	P300,P350,P500	8	16	
(Power Optimizers)	P405	6	13	
Maximum String Length (I	Power Optimizers)	25	50	
Maximum Power per Strir	ng	5250	11250	W
Parallel Strings of Different Lengths or		Yes		
Orientations		TE.	25	

 $^{^{\}rm (3)}$ It is not allowed to mix P405 with P300/P350/P500/P600/P700 in one string.

Power Optimizer

P370 / P401 / P404 / P485 / P500 / P505 / P601



POWER OPTIMIZER

PV power optimization at the module level

- Specifically designed to work with SolarEdge inverters
 Superior efficiency (99.5%)
- Up to 25% more energy
- Next generation maintenance with module-level monitoring
- Mitigates all types of modules mismatch-loss, from manufacturing tolerance to partial shading
- Flexible system design for maximum space utilization
- Module-level voltage shutdown for installer and firefighter safety
- Fast installation with a single bolt



/ Power Optimizer

P370 / P401 / P404 / P485 / P500 / P505 / P601

OPTIMIZER MODEL (typical module compatibilty)	P370 (60&70 Cell modules)	P401 (60&70 Cell modules)	P404 (for 60-cell and 72 cell, short strings)	P485 (for high voltage modules)	P500 (for 96-cell modules)	P505 (for higher current modules)	P601 (for 1 x high power PV module)	UNIT
INPUT								
Rated Input DC Power ⁽¹⁾	370	400	405	485	500	505	600	W
Absolute Maximum Input Voltage (Voc at lowest temperature)	6	50	80	125	80	83	65	Vdc
MPPT Operating Range	8 -	60	12.5 - 80	12.5 - 105	8 - 80	12.5-83	12.5 - 65	Vdc
Maximum Short Circuit Current (Isc)	11	12.5	11		10.1	1	4	Adc
Maximum Efficiency				99.5				%
Weighted Efficiency			98	.8			98.6	%
Overvoltage Category				II				
OUTPUT DURING OPERATION	(POWER OP	TIMIZER COI	NNECTED TO	OPERATING	SOLAREDGE	INVERTER)		
Maximum Output Current				15				Adc
Maximum Output Voltage	6	50	80		60	8	0	Vdc
OUTPUT DURING STANDBY (PC	WER OPTIM	IZER DISCON	NECTED FROM	1 SOLAREDG	E INVERTER	OR SOLARED	GE INVERTER	OFF)
Safety Output Voltage per Power Optimizer				1 ± 0.1				Vdc
STANDARD COMPLIANCE	"							
EMC			FCC Part 15 Clas	ss B, IEC61000-6-	-2, IEC61000-6-3			
Safety			IEC62109	-1 (class II safety	r), UL1741			
RoHS				Yes				
Fire Safety			VDE-A	AR-E 2100-712:20	013-05			
INSTALLATION SPECIFICATION	S							1
Maximum Allowed System Voltage				1000				Vdc
Dimensions (W x L x H)	129 x 153 x 27.5 /5.1 x 6 x 1.1	129 x 153 x 29.5 /5.1 x 6 x 1.16	129 x 153 x 42.5 / 5.1 x 6 x 1.7	129 x 159 x 49.5 /5.1 x 6.2 x 1.9	129 x 153 x 33.5 /5.1 x 6 x 1.3	129 x 162 x 59 / 5.1 x 6.4 x 2.3	129 x 153 x 52 / 5.1 x 6 x 2	mm / in
Weight (including cables)	655	/ 1.5	775 / 1.7	845 / 1.9	750 / 1.7	1064	/ 2.3	gr / lb
Input Connector		MC4 ⁽²⁾		Single or Dual MC4 ⁽²⁾⁽³⁾		MC4 ⁽²⁾		
Input Wire Length	0.16 / 0.52	2, 0.9 / 2.95			0.16 / 0.52			m / ft
Output Connector				MC4			T	
Output Wire Length		1.2 / 3.9 1.4 / 4.5						
Operating Temperature Range ⁽⁴⁾			-40	to +85 / -40 to +	+185			°C / °F
Protection Rating				IP68				
Relative Humidity				0 - 100				%
						·	·	

⁽¹⁾ Rated power of the module at STC will not exceed the optimizer "Rated Input DC Power". Modules with up to +5% power tolerance are allowed

PV System Design Using	g a Solaredge Inverter ⁽⁵⁾	Single Phase HD-WAVE	Single Phase	Three Phase	Three Phase for 277/480V Grid	
Minimum String Length	P370, P401, P500 ⁽⁶⁾	8	3	16	18	
(Power Optimizers)	P404, P485, P505, P601	6	5	14 (13 with SE3K ⁽⁷⁾)	14	
Maximum String Length (Power	Maximum String Length (Power Optimizers)		25		50	
Maximum Nominal Power per String ⁽⁸⁾		5700 5250		11250(9)	12750(10)	W
Parallel Strings of Different Lengths or Orientations		Yes				

⁽²⁾ For other connector types please contact SolarEdge

⁽³⁾ For dual version for parallel connection of two modules use the P485. In the case of an odd number of PV modules in one string, installing one P485 dual version power optimizer connected to one PV module is supported. When connecting a single module, seal the unused input connectors using the supplied pair of seals

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

⁽⁵⁾ It is not allowed to mix P404/P485/P505/P601 with P370/P401/P500 in one string
(6) The P370/P401/P500 cannot be used with the SE3K three phase inverter (available in some countries; refer to the three phase inverter SE3K-SE10K datasheet)

⁽⁷⁾ Exactly 10 when using SE3K-RW010BNN4

⁽⁸⁾ If the inverters rated AC power ≤ maximum nominal power per string, then the maximum power per string will be able to reach up to the inverters maximum input DC power Refer to: https://www.solaredge.com/sites/default/files/se-power-optimizer-single-string-design-application-note.pdf

⁽⁹⁾ For the 230/400V grid: it is allowed to install up to 13,500W per string when the maximum power difference between each string is 2,000W

⁽¹⁰⁾ For the 277/480V grid: it is allowed to install up to 15,000W per string when the maximum power difference between each string is 2,000W

Power Optimizer

For Europe

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
- Up to 25% more energy
- Superior efficiency (99.5%)
- Balance of System cost reduction; 50% less cables, fuses and combiner boxes, 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 up to two PV modules connected in series or in parallel



Power Optimizer

For Europe

P605 / P650 / P701 / P730 / P801

Power Optimizer Model	P605 (for 1 x high power PV	P650 (for up to 2 x 60-cell PV	P701 (for up to 2 x 60/120-cell PV	P730 (for up to 2 x 72-cell PV	P801 (for up to 2 x 72/144 cell PV	
(Typical Module Compatibility)	module)	modules)	modules)	modules)	modules)	
INPUT						
Rated Input DC Power ⁽¹⁾	605	650	700*	730**	800	W
Connection Method		Single	input for series connected	modules		
Absolute Maximum Input Voltage (Voc at lowest temperature)	65		96		125	Vdc
MPPT Operating Range	12.5 - 65	12.	5 - 80	12.	5-105	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 Category			II			
OUTPUT DURING OPERATION (POWER OP	TIMIZER CONNEC	TED TO OPERAT	TING SOLAREDGE	INVERTER)		
Maximum Output Current			15			Adc
Maximum Output Voltage			80			Vdc
OUTPUTDURING STANDBY (POWER OPTIMIZ	ZERDISCONNECTE	D FROM SOLAR	EDGE INVERTER C	RSOLAREDGEIN	VERTER 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	FCC Pa	rt 15, IEC 61000-6-2, and	IEC 61000-6-3 - Class B, I	EN 55011	
Safety			IEC62109-1 (class II safet	v)		
RoHS			Yes	,,		
Fire Safety		\	/DE-AR-E2100-712:2013	-05		
INSTALLATION SPECIFICATIONS						
Compatible SolarEdge Inverters		Three	Phase Inverters SE16K &	larger ⁽²⁾		
Maximum Allowed System Voltage			1000			Vdc
Dimensions (WxLxH)	129 x 153 x 52	129x1	153 x 42.5	129x1	53 x 49.5	mm
Weight	1064		834	(933	gr
Input Connector			MC4 ⁽³⁾			
Input Wire Length		0.16		0.16	/ 0.9 ⁽⁴⁾	m
Output Connector			MC4			
	Portrait orientation: 1.4		Portrait or	ientation: 1.2		
Output Wire Length	-	Landscape orientation: 1.8 Landscape orientation: 2.2		ation:2.2	m	
Operating Temperature Range ⁽⁵⁾			-40 to +85			°C
Protection Rating			IP68/NEMA6P			-
Relative Humidity			0-100			%
* For P701 models manufactured after work week 06/2020, the rated	IDC in part in 740M/					

- For P701 models manufactured after work week 06/2020, the rated DC input is 740W
- ** For P730 with manufactured date greater than working week 06 of 2020 the rated DC input is 760W and maximum lsc per Input is 11.75A
- *** For P801 models manufactured in work week 40/2020 or earlier, the maximum Isc per input is 11.75A
- The manufacture code is indicated in the Power Optimizer's serial number. Example: S/N SJ0620A-xxxxxx (working week 06 in 2020)
- (1) 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
- (2) For compliance with EN 55011 class A (where required), installation shall be done with inverter 20kVA or larger, and comply with the requirements in the EMC section of the installation manual
- (3) For other connector types please contact SolarEdge
- $(4) \ Longer inputs wire lengths are available for use with split junction box modules. (For 0.9 m/2.95 ft order P730-xxxLxxx) \\$
- $(5) For ambient temperature above +70^{\circ}C/ +158^{\circ}F power de-rating is applied. Refer to Power Optimizers Temperature De-Rating Technical Note for more details applied. The power Optimizers Temperature De-Rating Technical Note for more details applied. The power Optimizers Temperature De-Rating Technical Note for more details applied. The power Optimizers Temperature De-Rating Technical Note for more details applied. The power Optimizers Temperature De-Rating Technical Note for more details applied to the power Optimizers Temperature De-Rating Technical Note for more details applied to the power Optimizers Temperature De-Rating Technical Note for more details applied to the power Optimizers Temperature De-Rating Technical Note for more details applied to the power Optimizers Temperature De-Rating Technical Note for more details applied to the power Optimizers Temperature De-Rating Technical Note for more details applied to the power Optimizer Temperature De-Rating Technical Note for the power Optimizer Temperature De-Rating Technical Note for the power Optimizer Technical Note for the Powe$

PV System Design Using a SolarEdge Inverter ⁽⁶⁾⁽⁷⁾⁽⁸⁾		SE2	230/400V Grid 20K, SE25K*, SE33.3K*	230/400V Grid 230/400V Grid SE27.6K* SE30K*		277/480V Grid SE33.3K*, SE40K*			
Compatible Power Opt	timizers	P605	P650, P701, P730, P801	P605	P650, P701, P730, P801	P605	P650, P701, P730, P80°	P605, P650, P701, P730, P801	
Minimum String	Power Optimizers		14		14		15	14	
Length	PV Modules	14	27	14	27	15	29	27	
Maximum String	Power Optimizers		30		30		30	30	
Length	PV Modules	30	60	30	60	30	60	60	
Maximum Continuous I	Power per String		11250		11625		12750	12750	W
Maximum Allowed Connected Power per String ⁽⁹⁾ (Permitted only when the difference in connected power between strings is 2,000W or less)			13500	13875		15000		15000	W
Parallel Strings of Differ	rent Lengths or Orientations				Ye	es		I	

- * The same rules apply for Synergy units of equivalent power ratings, that are part of the modular Synergy Technology inverter
 (6) 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
 (7) 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
 (8) For SE25K and above, the minimum STC DC connected power should be 11KW
- (9) To connect more STC power per string, design your project using <u>SolarEdge Designer</u>

/ Power Optimizer **For Europe**

P800p/P850/P950/P1100

Power Optimizer Model (Typical Module Compatibility)	P800p (for up to 2 x 96- cell5" PV modules)	P850 (for up to 2 x high power or bi-facial modules)	P950 (for up to 2 x high power or bi-facial modules)	P1100 (for up to 2 x high power or bi-facial modules)	
INPUT					
Rated Input DC Power ⁽¹⁾	800	850	950	1100	W
Connection Method	Dual input for independently Connected modules	Sin	gle input for series connected mod	ules	
Absolute Maximum Input Voltage (Voc at lowest temperature)	83		125		Vdc
MPPT Operating Range	12.5-83		12.5-105		Vdc
Maximum Short Circuit Current per Input (Isc)	7	14	.1*	14.1	Adc
Maximum Efficiency		99	9.5		%
Weighted Efficiency		98	3.6		%
Overvoltage Category			ll		
OUTPUT DURING OPERATION (P	POWER OPTIMIZER CON	INECTED TO OPERATING	G SOLAREDGE INVERTER	₹)	
Maximum Output Current		1	8		Adc
Maximum Output Voltage		8	30		Vdc
OUTPUT DURING STANDBY (POW	VER OPTIMIZER DISCON	NECTED FROM SOLARED	OGE INVERTER OR SOLAI	REDGE INVERTER OFF)	
Safety Output Voltage per Power Optimizer		1±	0.1		Vdc
STANDARD COMPLIANCE					
EMC		FCC Part 15, IEC 61000-6-2, and I	FC 61000-6-3 - Class B. FN 55011		
Safety		, , , , , , , , , , , , , , , , , , , ,	class II safety)		
RoHS		· · · · · · · · · · · · · · · · · · ·	es		
Fire Safety		VDE-AR-E210	0-712:2013-05		
INSTALLATION SPECIFICATIONS	<u>I</u>				
Compatible SolarEdge Inverters	Т	hree Phase Inverters SE16K& larger	-(2)	Three Phase Inverters SE25K &larger	
Maximum Allowed System Voltage		10	00		Vdc
Dimensions (WxLxH)	129x 168 x 59		129×162×59		mm
Weight		10	64		gr
Input Connector		MC	Q4 ⁽³⁾		
Input Wire Length	0.16	0.16, 0.9,1.3, 1.6 ⁽⁴⁾	0.16, 1.3, 1.6 ⁽⁴⁾	0.16, 1.3 (4)	m
Output Connector		М	C4		
Output Wire Length	Landscape orientation: 1.8	Portrait orientation: 1.2 Landscape orie	entation: 2.2	2.4	m
Operating Temperature Range ⁽⁵⁾	zariascape orientation. 1.0	'	0 +85		°C
Protection Rating			IEMA6P		
Relative Humidity		· · · · · · · · · · · · · · · · · · ·	100		%

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)

(1) 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

(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-xxxXxxx)

(5) For ambient temperature 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 ⁽⁶⁾⁽⁷⁾⁽⁸⁾		230/400V Grid SE20K, SE25K*	230/400V Grid SE27.6K*	230/400V Grid SE30K*	230/400V Grid SE33.3K*	277/480V Grid SE33.3K*, SE40K*			
Compatible Power O	ptimizers	P800p, P850, P950, P1100	P800p, P850, P950, P1100	P800p, P850, P950, P1100	P800p, P850, P950, P1100	P800p, P850, P950, P1100	0		
Minimum String	Power Optimizers	14	14	15	14	14			
Length	PV Modules	27	27	29	27	27			
Maximum String	Power Optimizers	30	30	30	30	30			
Length	PV Modules	60	60	60	60	60			
Maximum Continuou	s Power per String	13500	13950	15300	13500	15300	W		
	Maximum Allowed Connected Power per String ⁽⁹⁾		imum Allowed Connected Power per String ⁽⁹⁾		1 string - 16200	1 string - 17550	2 strings or less - 15750	2 strings or less - 17550	
(Permitted only when the difference in connected power between strings is 2,000W or less)		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	W		
Parallel Strings of Different Lengths or Orientations				Yes	<u> </u>	1			

⁽²⁾ For compliance with EN 55011 class A (where required), installation shall be done with inverter 20kVA or larger, and comply with the requirements in the EMC section of the installation manual

⁽³⁾ For other connector types please contact SolarEdge
(4) Longer inputs wire length are available for use with split junction box modules

^{*} The same rules apply for Synergy units of equivalent power ratings, that are part of the modular Synergy Technology inverter

(6) P800p/P850/P9100 can be mixed in one string only with P800p/P850/P9100

(7) 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

(8) For SE25K and above, the minimum STC DC connected power should be 11kW

⁽⁹⁾ To connect more STC power per string, design your project using <u>SolarEdge Designer</u>



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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Power Optimizer For Residential Installations

S440, S500



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%)

- Mitigates all types of module mismatch loss, from 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



^{*} Functionality subject to inverter model and firmware version

/ Power Optimizer For Residential Installations

S440, S500

	S440	S500	UNIT
Rated Input DC Power ⁽¹⁾	440	500	W
Absolute Maximum Input Voltage (Voc)	60		Vdc
MPPT Operating Range	8 - 60		Vdc
Maximum Short Circuit Current (Isc) of Connected PV Module	14.5	15	Adc
Maximum Efficiency	99.5		%
Weighted Efficiency	98.6		%
Overvoltage Category	II		
OUTPUT DURING OPERATION			
Maximum Output Current	15		Adc
Maximum Output Voltage	60		Vdc
OUTPUT DURING STANDBY (POWER OPTIMIZER DISC	CONNECTED FROM INVERTER OR IN	IVERTER OFF)	•
Safety Output Voltage per Power Optimizer	1		Vdc
STANDARD COMPLIANCE			
EMC	FCC Part 15 Class B, IEC61000-6-2, IEC	C61000-6-3, CISPR11, EN-55011	
Safety	IEC62109-1 (class II sa	fety), UL1741	
Material	UL94 V-0, UV R	esistant	
RoHS	Yes		
Fire Safety	VDE-AR-E 2100-71	2:2013-05	
INSTALLATION SPECIFICATIONS			
Maximum Allowed System Voltage	1000		Vdc
Dimensions (W x L x H)	129 x 155 x	30	mm
Weight (including cables)	655 / 1.5		gr / lb
Input Connector	MC4 ⁽²⁾		
Input Wire Length	0.1		m
Output Connector	MC4		
Output Wire Length	(+) 2.3, (-) 0.10		m
Operating Temperature Range ⁽³⁾	-40 to +8	5	°C
Protection Rating	IP68 / NEMA	A6P	
Relative Humidity	0 - 100		%

⁽¹⁾ 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

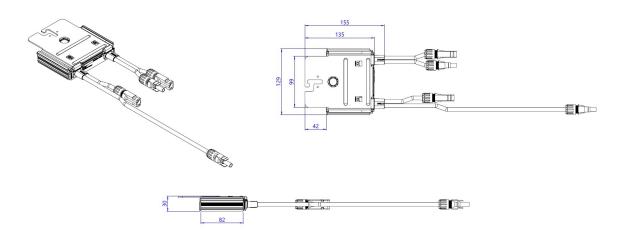
⁽²⁾ For other connector types please contact SolarEdge
(3) For ambient temperature above +70°C / +158°F power de-rating is applied. Refer to Power Optimizers Temperature De-Rating Technical Note for more details

PV System Design Using a SolarEdge Inverter		Single Phase HD-Wave	Three Phase	Three Phase for 277/480V Grid			
Minimum String Length (Power Optimizers)			16	18			
Maximum String Length (Power	Maximum String Length (Power Optimizers)		50				
Maximum Nominal Power per String ⁽⁴⁾		5700	11250 ⁽⁵⁾ 12750 ⁽⁶⁾		W		
Parallel Strings of Different Lengths or Orientations			Yes				

⁽⁴⁾ If the inverters rated AC power

maximum nominal power per string, then the maximum power per string will be able to reach up to the inverters maximum input DC

⁽⁷⁾ It is not allowed to mix S-series and P-series Power Optimizers in new installations



power Refer to: https://www.solaredge.com/sites/default/files/se-power-optimizer-single-string-design-application-note.pdf
(5) For the 230/400V grid: it is allowed to install up to 13,500W per string when the maximum power difference between each string is 2,000W
(6) For the 277/480V grid: it is allowed to install up to 15,000W per string when the maximum power difference between each string is 2,000W