Power Optimiser

for Australia

P600 / P700 / P800p / P850

POWER OPTIMISER

PV power optimisation 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 two PV modules connected in series or in parallel

Power Optimiser for Australia

P600 / P700 / P800p / P850

Optimiser model (typical module compatibility)	P600 (for 2 x 60-cell PV modules)	P700 (for 2 x 72-cell PV modules)	P800p (for parallel connection of 2x 96-cell 5'' PV modules)	P850 (for series connection of 2x high power or bi-facial modules)	
INPUT					
Rated Input DC Power[1]	600	730	800	850	W
Absolute Maximum Input Voltage (Voc at lowest temperature)	96	125	83	120	Vdc
MPPT Operating Range	12.5 - 80	12.5 - 105	12.5 - 83	12.5 - 105	Vdc
Maximum Short Circuit Current (Isc)	10.25	11	14	12.5	Adc
Maximum Efficiency	99.5				%
Weighted Efficiency	98.6				%
Overvoltage Category	II				
OUTPUT DURING OPERATION (POWER OPTIMISER CONNECTED TO OPERATING SOLAREDGE INVERTER)					
Maximum Output Current	15		18		Adc
Maximum Output Voltage	85				Vdc
OUTPUT DURING STANDBY (POWER OPTIMISER DISCONNECTED FROM SOLAREDGE INVERTER OR SOLAREDGE INVERTER OFF)					
Safety Output Voltage per Power Optimiser	1 ± 0.1				Vdc
STANDARD COMPLIANCE					
EMC	FCC Part15 Class B, IEC61000-6-2, IEC61000-6-3				
Safety	IEC62109-1 (class II safety)				
RoHS	Yes				
Fire Safety	VDE-AR-E 2100-712:2013-05				
INSTALLATION SPECIFICATIONS					
Compatible SolarEdge Inverters	Three phase inverters SE15K & larger	Three phase inverters SE16K & larger			
Maximum Allowed System Voltage	1000				Vdc
Dimensions (W x L x H)	128 x 152 x 43	128 x 152 x 50	128 x 158 x 59	128 x 152 x 59	mm
Weight (including cables)	834	933	1019	1064	gr
Input Connector[2]	MC4		MC4[5]	MC4	
Output Connector	MC4				
Output Wire Length	1.8	2.1	1.8	2.1	m
Operating Temperature Range[3]	-40 - +85				˚C
Protection Rating	IP68 / NEMA6P				
Relative Humidity	0 - 100				%

[1] Rated STC power of the module. Module of up to +5% power tolerance 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 Optimisers Temperature De-Rating Application Note for more details.

PV SYSTEM DESIGN USING A SOLAREDGE INVERTER[4][5]		THREE PHASE SE15K		THREE PHASE SE16K AND LARGER				
Compatible Power Optimisers		P600	P700[6]	P600	P700	P800p	P850[6]	
Minimum String Length	Power Optimisers	13				12		
	PV Modules	26				24		
Maximum String Length	Power Optimisers	30						
	PV Modules	60						
Maximum Power per String		11250[7]				13500		W
Parallel Strings of Different Lengths or Orientations		Yes						

[4] P600 and P700 can be mixed in one string. It is not allowed to mix P600/P700/P800p/P850 with P300/P370/P500/P404/P405/P505 in one string.
[5] In a case of odd number of PV modules in one string it is allowed to install one P600/P700/P800p/P850 power optimiser connected to one PV module. When connecting a single module to the P800p seal the unused input connectors with the supplied pair of seals.
[6] Longer inputs wire length (90 cm) are available for use with split junction box modules (Order P700-XXXLXXX or P850-XXXLXXX).
[7] For SE27.6K: It is allowed to install up to 13,500W per string when 3 strings are connected to the inverter and when the maximum power difference between the strings is up to 2,000W; inverter max DC power: 37,250W.

CE