

Power Optimiser

For Australia

P750



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
- Support high input current, bifacial and high power modules

Power Optimiser Model (Typical Module Compatibility)	P750 (for 1 x high power PV module)	Units
INPUT		
Rated Input DC Power ⁽¹⁾	750	W
Connection Method	Single input	
Absolute Maximum Input Voltage (Voc at lowest temperature)	60	Vdc
MPPT Operating Range	12.5 - 60	Vdc
Maximum Short Circuit Current per Input (Isc)	20	Adc
Maximum Efficiency	99.5	%
Weighted Efficiency	98.6	%
Overvoltage Category	II	
OUTPUT DURING OPERATION (POWER OPTIMISER CONNECTED TO OPERATING SOLAREEDGE INVERTER)		
Maximum Output Current	18	Adc
Maximum Output Voltage	80	Vdc
OUTPUT DURING STANDBY (POWER OPTIMISER DISCONNECTED FROM SOLAREEDGE INVERTER OR SOLAREEDGE INVERTER OFF)		
Safety Output Voltage per Power Optimiser	1 ± 0.1	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-E 2100-712:2013-05	
INSTALLATION SPECIFICATIONS		
Compatible SolarEdge Inverters	Three phase inverters SE15K & larger	
Maximum Allowed System Voltage	1000	Vdc
Dimensions (W x L x H)	129 x 169 x 59 / 5.1 x 6.65 x 2.32	mm / in
Weight	1340 / 2.95	gr / lb
Input Connector	MC4 ⁽²⁾	
Input Wire Length	0.9 / 2.95	m / ft
Output Connector	MC4	
Output Wire Length	1.4 / 4.5	m / ft
Operating Temperature Range ⁽³⁾	-40 to +85 / -40 to +185	°C / °F
Protection Rating	IP68 / NEMA6P	
Relative Humidity	0 - 100	%

(1) Rated power of the module at STC will not exceed the power optimiser "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 Optimisers Temperature [De-Rating Technical Note](#) for more details

PV System Design Using a SolarEdge Inverter ⁽⁴⁾⁽⁵⁾⁽⁶⁾		230/400V Grid SE15K, SE16K, SE17K	230/400V Grid SE25K*	230/400V Grid SE27.6K*	230/400V Grid SE30K*	230/400V Grid SE33.3K*	
Compatible Power Optimisers		P750					
Minimum StringLength	Power Optimisers	14	14	14	14	14	
	PV Modules	14	14	14	14	14	
Maximum StringLength	Power Optimisers	30	30	30	30	30	
	PV Modules	30	30	30	30	30	
Maximum Continuous Power per String		13500W	13500W	13950W	13500W	13500W	W
Maximum Allowed Connected Power per String ⁽⁶⁾ (Permitted only when the difference in connected power between strings is 2000W or less)		1 string – 15750W	1 string – 15750W	1 string – 16200W	2 strings or less - 15750W	2 strings or less - 15750W	W
		2 strings or more - 18500W	2 strings or more - 18500W	2 strings or more - 18500W	3 strings or more - 18500W	3 strings or more - 18500W	
Parallel Strings of Different Lengths or Orientations		Yes					

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

(4) P750 can be mixed in one string only with P750

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

(6) To connect more STC power per string, design your project using [SolarEdge Designer](#)

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