



SolarEdge Power Optimizer

Module Add-On

P300 / P350 / P370 / P404 / P405 / P500



POWER OPTIMIZER

PV power optimization at the module-level

- Specifically designed to work with SolarEdge inverters
- 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



SolarEdge Power Optimizer Module Add-On

P300 / P350 / P370 / P404 / P405 / P500

	P300 (for 60-cell modules)	P350 (for high-power 60-cell and for 72-cell modules)	P370 (for higher- power 60 and 72-cell modules)	P500 (for 96-cell modules)	P404 (for 60-cell and 72-cell, short strings)	P405 (for thin film modules)	
INPUT							
Rated Input DC Power ⁽¹⁾	300	350	370	500	405	405	W
Absolute Maximum Input Voltage (Voc at lowest temperature)	48	60		80	80	125	Vdc
MPPT Operating Range	8 - 48	8 - 60		8 - 80	12.5 - 80	12.5 - 105	Vdc
Maximum Continuous Input Current (Isc)	10	11		10.1			Adc
Maximum Efficiency				99.5			%
Weighted Efficiency				98.8			%
Overvoltage Category				II			
OUTPUT DURING OPERATION (POWER OPTIMIZER CONNECTED TO OPERATING SOLAREEDGE INVERTER)							
Maximum Output Current				15			Adc
Maximum Output Voltage	60			85			Vdc
OUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM SOLAREEDGE INVERTER OR SOLAREEDGE INVERTER OFF)							
Safety Output Voltage per Power Opti- mizer				1			Vdc
STANDARD COMPLIANCE							
EMC	FCC Part15 Class B, IEC61000-6-2, IEC61000-6-3						
Safety	IEC62109-1 (class II safety), UL1741						
RoHS	Yes						
Fire Safety	VDE-AR-E 2100-712:2013-05						
INSTALLATION SPECIFICATIONS							
Maximum Allowed System Voltage	1000						Vdc
Dimensions (W x L x H)	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 43 / 5 x 5.97 x 1.69	128 x 152 x 50 / 5 x 5.97 x 1.96	mm / in
Weight (including cables)	630 / 1.4	655 / 1.5		750 / 1.7	775 / 1.7	845 / 1.9	gr / lb
Input Connector	MC4 ⁽²⁾						Single or Dual MC4 ⁽³⁾
Output Connector	MC4						
Output Wire Length	0.95 / 3.0	1.2 / 3.9	0.95 / 3.0	1.2 / 3.9			m / ft
Operating Temperature Range	-40 - +85 / -40 - +185						°C / °F
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⁾ Dual version for parallel connection of 2 thin film modules; P/N: P405-5RMDMRM.

PV SYSTEM DESIGN USING A SOLAREEDGE INVERTER ⁽⁴⁾		SINGLE PHASE HD-WAVE	SINGLE PHASE	THREE PHASE	
Minimum String Length (Power Optimizers)	P300,P350,P370,P500 ⁽⁵⁾	8		16	
	P404,P405	6		13 (12 with SE3K)	
Maximum String Length (Power Optimizers)	25		50		
Maximum Power per String	5700		5250	11250	W
Parallel Strings of Different Lengths or Orientations			Yes		

⁽⁴⁾ It is not allowed to mix P404/P405 with P300/P350/P370/P500/P600/P700 in one string.

⁽⁵⁾ The P300/P350/P370/P500 cannot be used with the SE3K three phase inverter (available in some countries; refer to E-Series inverter datasheet).

