



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-SRMDMRM.

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).

