



SolarEdge Power Optimizer

Module Add-On

P300 / P350 / P405 / P500



POWER OPTIMIZER

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



SolarEdge Power Optimizer Module Add-On

P300 / P350 / P405 / P500

	P300 (for 60-cell modules)	P350 (for 72-cell modules)	P500 (for 96-cell modules)	P405 (for thin film modules)	
INPUT					
Rated Input DC Power ⁽¹⁾	300	350	500	405	W
Absolute Maximum Input Voltage (Voc at lowest temperature)	48	60	80	125	Vdc
MPPT Operating Range	8 - 48	8 - 60	8 - 80	12.5 - 105	Vdc
Maximum Continuous Input Current (Isc)	10				Adc
Maximum Efficiency	99.5				%
Weighted Efficiency	98.8				%
Overvoltage Category	II				
OUTPUT DURING OPERATION (POWER OPTIMIZER CONNECTED TO OPERATING INVERTER)					
Maximum Output Current	15				Adc
Maximum Output Voltage	60		85		Vdc
OUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM INVERTER OR INVERTER OFF)					
Safety Output Voltage per Power Optimizer	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)	141 x 212 x 40.5 / 5.55 x 8.34 x 1.59				mm / in
Weight (including cables)	950 / 2.1				gr / lb
Input Connector	MC4 / Amphenol / Tyco / H+S			MC4	
Output Connector	MC4				
Output Wire Length	0.95 / 3.0	0.95 / 3.0 or 1.2 / 3.9	1.2 / 3.9		m / ft
Operating Temperature Range	-40 - +85 / -40 - +185				°C / °F
Protection Rating	IP65 / NEMA4				
Relative Humidity	0 - 100				%

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

PV SYSTEM DESIGN USING A SOLAREEDGE INVERTER ⁽²⁾	SINGLE PHASE		THREE PHASE	
	Minimum String Length (Power Optimizers)	8		16
Maximum String Length (Power Optimizers)	25		50	
Maximum Power per String	5250		11250	W
Parallel Strings of Different Lengths or Orientations	Yes			

⁽²⁾ It is not allowed to mix P405 with P300/P350/P500/P600/P700 in one string.

