Power Optimizer
Frame-Mounted

P300 / P370 / P404 / P500

POWER OPTIMIZER

Fast mount power optimizers with module-level optimization

- Specifcally designed to work with SolarEdge inverters
- Quicker installation - Power optimizers can be mounted in advance saving installation time
- 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
- Next generation maintenance with module level monitoring
- Module-level voltage shutdown for installer and firefighter safety

solaredge

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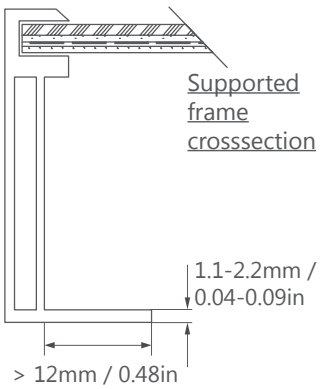
OPTIMIZER MODEL (TYPICAL MODULE COMPATIBILTY)	P300 (FOR 60-CELL MODULES)	P370 (FOR HIGH-POWER 60-CELL AND FOR 72-CELL MODULES)	P404 (FOR 60-CELL AND 72-CELL, SHORT STRINGS)	P500 (FOR 96-CELL MODULES)	
INPUT					
Rated Input DC Power[1]	300	370	405	500	W
Absolute Maximum Input Voltage (Voc at lowest temperature)	48	60	80		Vdc
MPPT Operating Range	8 - 48	8 - 60	12.5 - 80	8 - 80	Vdc
Maximum Short Circuit Current (Isc)	11		10.1		Adc
Maximum Efficiency	99.5				%
Weighted Efficiency	98.8				%
Overvoltage Category	II				
OUTPUT DURING OPERATION (POWER OPTIMIZER CONNECTED TO OPERATING SOLAREDGE INVERTER)					
Maximum Output Current	15				Adc
Maximum Output Voltage	60		85	60	Vdc
OUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM SOLAREDGE INVERTER OR SOLAREDGE INVERTER OFF)					
Safety Output Voltage per Power Optimizer	1 ± 0.1				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)	139 x 165 x 40 / 5.5 x 6.5 x 1.6		139 x 165 x 48 / 5.5 x 6.5 x 1.9		mm / in
Weight (including cables)	750 / 1.65	775 / 1.7	895 / 2.0	870 / 1.9	gr / lb
Input Connector	MC4[2]				
Input Wire Length	0.16 / 0.52				m / ft
Output Connector	MC4				
Output Wire Length	0.9 / 2.95	1.2 / 3.9			m / ft
Operating Temperature Range[3]	-40 - +85 / -40 - +185				˚C / ˚F
Protection Rating	IP68 / NEMA6P				
Relative Humidity	0 - 100				%

[1] Rated power of the module at STC will not exceed the optimizer "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 +85°C / +185°F power de-rating is applied. Refer to Power Optimizers Temperature De-Rating Technical Note for more details.

PV SYSTEM DESIGN USING A SOLAREDGE INVERTER[4]		SINGLE PHASE HD-WAVE	SINGLE PHASE	THREE PHASE	THREE PHASE FOR 277/480V GRID	
Minimum String Length (Power Optimizers)	P300/ P370/ P500[5]	8		16	18	
	P404	6		14 (13 with SE3K)	14	
Maximum String Length (Power Optimizers)		25		50	50	
Maximum Power per String		5700	5250	11250[6]	12750	W
Parallel Strings of Different Lengths or Orientations		Yes				

[4] It is not allowed to mix P404 with P300/P370/P500 in one string
[5] The P300/P370/P500 cannot be used with the SE3K three phase inverter (available in some countries; refer to Three Phase Inverter SE3K-SE10K datasheet).
[6] For SE27.6K, SE55K, SE82.8K: 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



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