



SolarEdge Power Optimizer

Frame-Mounted Module Add-On for
Commercial Installations for North America

P700 / P730



POWER OPTIMIZER

Fast mount power optimizers with module-level optimization

- 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
- Compliant with arc fault protection and rapid shutdown NEC requirements (when installed as part of the SolarEdge system)
- Module-level voltage shutdown for installer and firefighter safety



SolarEdge Power Optimizer Module Add-On

For Commercial Installations for North America P700 / P730

Optimizer model (typical module compatibility)	P700 (for 2 x 72-cell PV modules)	P730 (for 2 x high power 72-cell modules)	
INPUT			
Rated Input DC Power ⁽¹⁾	700	730	W
Absolute Maximum Input Voltage (Voc at lowest temperature)	125		Vdc
MPPT Operating Range	12.5 - 105		Vdc
Maximum Short Circuit Current (Isc)	10.1	11	Adc
Maximum DC Input Current	12.63	13.75	Adc
Maximum Efficiency	99.5		%
Weighted Efficiency	98.6		%
Overvoltage Category	II		
OUTPUT DURING OPERATION (POWER OPTIMIZER CONNECTED TO OPERATING SOLAREEDGE INVERTER)			
Maximum Output Current	15		Adc
Maximum Output Voltage	85		Vdc
OUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM SOLAREEDGE INVERTER OR SOLAREEDGE 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		
INSTALLATION SPECIFICATIONS			
Compatible SolarEdge Inverters	Three phase inverters		
Maximum Allowed System Voltage	1000		Vdc
Dimensions (W x L x H)	139 x 165 x 63 \ 5.5 x 6.5 x 2.5		mm / in
Weight (including cables)	1185 / 2.6		gr / lb
Input Connector	MC4 Compatible		
Output Wire Type / Connector	Double Insulated; MC4 Compatible		
Output Wire Length	2.1 / 6.9		m / ft
Operating Temperature Range ⁽²⁾	-40 - +85 / -40 - +185		°C / °F
Protection Rating	IP68 / NEMA6P		
Relative Humidity	0 - 100		%

⁽¹⁾ Rated combined STC power of 2 modules connected in series. Module of up to +5% power tolerance allowed.

⁽²⁾ For ambient temperature above +70°C / +158°F power de-rating is applied. Refer to Power Optimizers Temperature De-Rating Application Note for more details.

PV SYSTEM DESIGN USING A SOLAREEDGE INVERTER ⁽³⁾⁽⁴⁾	THREE PHASE 208V	THREE PHASE 480V	
Minimum String Length (Power Optimizers)	8	13	
Maximum String Length (Power Optimizers)	30	30	
Maximum Power per String	6000 ⁽⁶⁾	12750 ⁽⁷⁾	W
Parallel Strings of Different Lengths or Orientations	Yes		

⁽³⁾ P600, P700 and P730 can be mixed in one string. It is not allowed to mix P600/P700/P730 with P300/P320/P400/P405 in one string.

⁽⁴⁾ In a case of odd number of PV Modules in one string it is allowed to install one P700/P730 power optimizer connected to one PV Module.

⁽⁵⁾ P700 and P730 design with three phase 208V inverters is limited. Use the SolarEdge Site Designer for verification.

⁽⁶⁾ For SE14.4KUS-208: It is allowed to install up to 6,500W per string when 3 strings are connected to the inverter and when the maximum power difference between the strings is up to 1,000W.

⁽⁷⁾ For SE33.3KUS: It is allowed to install up to 15,000W per string when 3 strings are connected to the inverter and when the maximum power difference between the strings is up to 2,000W.

