



Power Optimizer

Embedded

OPJ300-LV



POWER OPTIMIZER

PV power optimization at the module-level

- A certified junction box (US, IEC) incorporating the field proven SolarEdge power optimizer
- Up to 25% more energy and superior efficiency (99.5%)
- Mitigates all types of module mismatch losses, from manufacturing tolerance to partial shading
- Module-level voltage shutdown for installer and firefighter safety
- Simplifies system design by eliminating power optimizer selection process
- Independent optimization technology (IndOP™) - operation with any inverter and no additional hardware or addition of SolarEdge inverter for added benefits
- Unique Pass-Thru connector for easy module flashing and field replacement



Power Optimizer

Embedded OPJ300-LV

INPUT		
Rated Input DC Power	330	W
Absolute Maximum Input Voltage (Voc)	55	Vdc
MPPT Operating Range	5 - 55	Vdc
Maximum Short Circuit Current (Isc) of connected PV Module	10	Adc
Maximum DC Input Current	12.5	Adc
Maximum Efficiency	99.5	%
Weighted Efficiency	98.9	%
Overvoltage Category	II	
OUTPUT DURING OPERATION		
Maximum Output Current	15	Adc
Maximum Output Voltage	60	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, TUV-SUD), UL1741 (TUV-Rheinland & CSA)	
PV Junction Box	EN50548 (TUV-SUD), UL3730 (TUV-Rheinland & CSA)	
Material	UL-94 (5-VA), UV Resistant	
RoHS	Yes	
INSTALLATION SPECIFICATIONS		
Maximum Allowed System Voltage	Compliant with 600V (UL) / 1000V (IEC) ⁽³⁾	Vdc
Dimensions (WxLxH)	208x155x29.5 / 8.2x6.1x1.16	mm / in
Weight (excluding cables)	700 / 1.5	g / lb
Output Wire Type	Double insulated; 6 mm ² ; MC4 Compatible	
Output Wire Length	0.95 / 3.0	m / ft
Operating Temperature Range	-40 - +85 / -40 - +185	°C / °F
Protection Rating	IP67 / NEMA6	
Relative Humidity	0 - 100	%

⁽¹⁾ Available only if Safety & Monitoring Interface (SMI) is installed or if SafeDC™ is disabled during installation by a one-time operation using the SolarEdge Key.

⁽²⁾ When SolarEdge Safety and Monitoring Interface (SMI) is installed and off.

⁽³⁾ 1000V(UL) model available.

Note - OPI power optimizer warranty shall not exceed the maximum of (1) the module product warranty and (2) the module power warranty periods provided by the applicable module manufacturer.

PV SYSTEM DESIGN USING A SOLAREEDGE INVERTER ⁽⁴⁾	SINGLE PHASE	THREE PHASE 208V	THREE PHASE 480V	
Minimum String Length (Power Optimizers)	8	10	18	
Maximum String Length (Power Optimizers)	25	25	50	
Maximum Power per String	5250	6000	12750	W
Parallel Strings of Different Lengths or Orientations		Yes		

