

SOLAREGE COMMERCIAL POWER OPTIMISER

POWER OPTIMISER MODULE ADD-ON P850

The SolarEdge commercial range of Power Optimisers are DC/DC converters that connect to two panels to monitor and control their collective performance.

This design feature ensures fewer system components, faster installations and cost reductions. The performance of the system is improved by mitigating mismatch losses caused by partial shading.



solaredge



**SUITABLE FOR
COMMERCIAL
APPLICATIONS**



HOW YOU BENEFIT



HIGH EFFICIENCY

Superior efficiency of up to 99.5%, generating more power from your PV system.



FLEXIBLE DESIGN

Panel level management allows flexible designs and increased power production.



SAFE OPERATION

Automatic panel-level voltage shutdown feature for installer and firefighter safety.



COST EFFECTIVE

Save on Balance-of-System (BOS) components and reduced installation times.

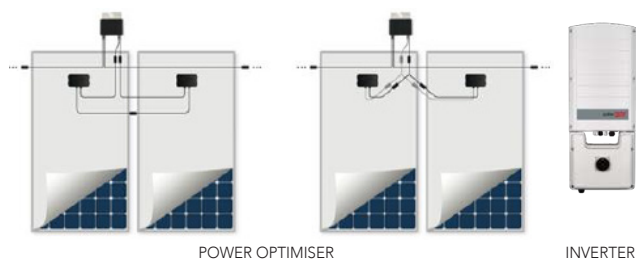


SOLAHART WARRANTY

Enjoy a 12-year warranty, for peace of mind.*

Technical Data

POWER OPTIMISER TECHNICAL DATA		P850
Input (DC)		
Rated input DC power		850 W
Absolute maximum input voltage (Voc at lowest temperature)		125 Vdc
MPPT operating range		12.5 - 105 Vdc
Maximum short circuit input current (Isc)		12.5 Adc
Maximum efficiency		99.5%
Weighted efficiency		98.6%
Overvoltage category		II
Output During Operation (when connected to operating SolarEdge inverter)		
Maximum DC output current		18 Adc
Maximum DC output voltage		80 Vdc
Output During Standby (when disconnected from SolarEdge inverter or inverter off)		
Safety output voltage per Power Optimiser		1 ± 0.1 Vdc
Installation Specifications		
Compatible SolarEdge inverters		Three-Phase inverters SE15K & larger
Maximum allowed system voltage (DC)		1000 Vdc
Dimensions (W x L x H)		129 x 162 x 59 mm
Weight (including cables)		1064 g
Input connector		MC4
Input wire length		1.30 m
Output connector		MC4
Output wire length		2.2 m
Operating temperature range		-40°C to +85°C
Protection rating		IP68 / NEMA6P
Relative humidity		0 - 100%
Product Details		
SolarEdge part number		P850
Solahart Warranty		12 years*
PV System Design using a SolarEdge Inverter⁽¹⁾⁽²⁾		P850 with Three-phase Commercial Inverter
Minimum string length (Power Optimisers)		14
Maximum string length (Power Optimisers)		30
Maximum power per string ⁽³⁾		P850 = 13500 W
Parallel strings of different lengths or orientations		Yes
Standard Compliance		
EMC		FCC Part 15 Class B, IEC 61000-6-2, IEC 61000-6-3
Safety		IEC 62109-1 (class II safety)
RoHS		Yes
Fire safety		VDE-AR-E 2100-712:2013-05



⁽¹⁾ It is not allowed to mix P850 with P370/P404/P401/P505 in one string.

⁽²⁾ In a case of odd number of PV modules in one string, it is allowed one P850 Power Optimiser to one PV Module.

⁽³⁾ For the 230/400V grid: with P850 up to 15,750W per string may be installed when the maximum power difference between each string is 2,000W.

* For full details see Solahart Owner's Guide & Installation Instructions.