

Power Optimizer

Service Model for Commercial Systems

R800



R-Series Service Power Optimizers for P-Series RMA

/ Simpler Service and O&M

- /** Cable layout similar to the P-series power optimizers for faster replacement
- /** One fits all – one part number can replace multiple power optimizer models for easier logistics

/ High Safety with Support for All P-Series Features

- /** Automatic module-level voltage shutdown with SafeDC™, ensuring maximum protection of people and property
- /** Does not support Sense Connect

Compatibility Table

P-Series Power Optimizer	RMA Power Optimizer
P600 / P605 / P650 / P700 / P701 / P730 / P801	R800

/ Power Optimizer

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	R800	UNIT
INPUT		
Rated Input DC Power ⁽¹⁾	850	W
Absolute Maximum Input Voltage (Voc)	125	Vdc
MPPT Operating Range	12.5 – 105	Vdc
Maximum Short Circuit Current (Isc) of Connected PV Module	15	Adc
Maximum Efficiency	99.5	%
Weighted Efficiency	98.8	%
Oversvoltage Category	II	
OUTPUT DURING OPERATION		
Maximum Output Current	15	Adc
Maximum Output Voltage	80	Vdc
OUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM INVERTER OR INVERTER OFF)		
Safety Output Voltage per Power Optimizer	1	Vdc
STANDARD COMPLIANCE		
EMC	FCC Part 15 Class B, IEC61000-6-2, IEC61000-6-3, CISPR11, EN-55011	
Safety	IEC62109-1 (class II safety)	
Material	UL94 V-0, UV Resistant	
RoHS	Yes	
Fire Safety	VDE-AR-E 2100-712:2013-05	
INSTALLATION SPECIFICATIONS		
PV Installation Type	P-Series Optimizer Replacement	
Maximum Allowed System Voltage	1000	Vdc
Dimensions (W x L x H)	129 x 155 x 45 / 5.08 x 6.10 x 1.77	mm / in
Weight	946 / 2.1	gr / lb
Input Connector	MC4 ⁽²⁾	
Input Wire Length	Short input option: 0.16 / 0.52 Long input option: 0.9 / 2.95	m / ft
Output Connector	MC4	
Output Wire Length	(+) 2.2, (-) 2.2 / (+) 7.22, (-) 7.22	m / ft
Operating Temperature Range ⁽³⁾	-40 to +85 / -40 to 185	°C / °F
Protection Rating	IP68 / NEMA6P	
Relative Humidity	0 – 100	%

(1) Rated power of the module at STC will not exceed the Power 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 temperatures above +70°C / +158°F, power derating is applied. Refer to the [Power Optimizers Temperature Derating](#) technical note for details.