

Smart Power Optimizer



Module-Level MPPT Function

Automatic shadow recognition improves power generation by up to **30%****.



Rapid And Safe Shutdown

Reduce the DC high voltage of the PV module array to below safe voltage within **15s***.



Module Operation Status Monitor

Real-time monitor the operational status of PV modules.



Self-Developed ASIC

Define the Smart Power Optimizer at the chip level.



Accurate Fault Location

Rapid diagnose to pinpoint faulty PV modules and prevent the risk of failure by anticipating in advance.



Compatible Multifunctional Adaptations

Adaptive compatibility with most third-party inverters.

Datasheet

Smart Power Optimizer		
Product Model	PVO-C600-U1	PVO-C800-U1
INPUT		
Rated Input Power	600W	800W
Max Input Voltage	80V	80V
Max Input Current	16A	20A
Max Input Short-Circuit Current	18A	23A
Max Efficiency	99.50%	
MPPT Voltage Range	12～80V	
OUTPUT		
Rated Output Power	600W	800W
Max Output Voltage	80V	80V
Max Output Current	16A	20A
Bypass	YES	YES
Output Shutdown Voltage	0V	0V
COMMUNICATION		
Communication	HPLC	
CERTIFICATION		
Safety	IEC/EN 62109-1	
	NB/T 42143-2018	
	GB/T 4208-2017	
EMC	IEC/EN 61000-6-1/-2/-3/-4	
GENERAL PARAMETERS		
Dimension	112mm(L)× 88mm(W)× 27mm(H)	
Weight	<900g	
Number Of Input/Output Ports	1/1	
Input Interface	MC4 Compatible/ MC4 Original	
Output Interface	MC4 Compatible/ MC4 Original	
Shutdown Time	<15s	
Cable Length	INPUT 0.35m&0.9m/OUTPUT 1.3m/Customizable	
Operating Altitude	4000M	
Protection Level	Class II	
Temperature Range	-40 ～ +85℃	
Relative Humidity Range	0 ～ 100%	
Ingress Protection Rating	IP68	
Max System Voltage	1500V	

* The data is obtained from the third-party laboratory under specific test conditions.
**The data is based on internal calculations, actual use may vary slightly, due to difference in boundary conditions.