

With the **POWERSTATION 247**, clean solar energy can be stored and used day and night, and during power outages thus improving grid stability, compensating power peaks and maximizing return on renewable energy investments. It is a fully integrated scalable system 5 kW, 10 kW, 15 kW. The free standing cabinet is easy to install and easy to use. The system integrates up to 3 hybrid inverters, solar MPP-trackers, charge controller and lithium - iron batteries, as well as all necessary field wiring terminals and disconnect switches. It is truly and uniquely 'plug and play'.

Device name:	POWERMODULE 5 kW	POWERSTATION 247 SYSTEM ENCLOSURE
<b>AC grid-tie output</b>		
Grid scheme	120V/60Hz, single-phase, three-wire system (L1, L2, Neutral)	
Nominal output voltage	120/240 VAC	
Nominal output frequency	60 Hz	
Grid feed-in power range	0 – 5000 W	0 -15 kW
Output power (cont.) at 35°C /95°F	5000 W; 2500 W per phase	15 kW ; 7.5 kW per phase
Grid feed-in current range	0 – 20.83 A per phase	0 -62.5 A per phase
Max. continuous output current	20.83 A per phase	62.5 A per phase
Grid feed-in voltage range L1-N	105.6 to 132 V	105.6 to 132 V
Grid feed-in voltage range L2-N	105.6 to 132 V	105.6 to 132 V
Anti-islanding default values	105.6 to 132 V	
Grid feed-in frequency	59.3 to 60.5 Hz	
Anti-islanding default values	59.3 to 60.5 Hz	
Grid feed-in power factor	>0.99 for Pout >1000 W	
AC output circuit breaker	2-pole, 2x 25 A MCB in system enclosure external 63 A branch fuses or circuit breakers	
AC grid disconnect switch	2-pole, 2x 63 A disconnect switch in system enclosure	
<b>AC stand-alone output</b>		
Grid scheme	120V/60Hz, two-phase, three-wire system (L1, L2, Neutral)	
Nominal output voltage	120/240 VAC	
Nominal output frequency	60 Hz	
Output power (cont.) at 35°C / 95°F	5000 W; 2500 W per phase	15 kW ; 7.5 kW per phase
Max. continuous output current	20.83 A per phase	62.5 A per phase
Maximum output current 5 sec.(rms)	41 A (120 V), electronically limited	
Output power factor range	0.5 cap. – 1 – 0.5 ind.	
Output frequency	60 Hz +/- 0.1%	
Output voltage	L1-N / L2-N: 120 V +/- 3%; L1-L2: 240 V +/- 3%	
Total harmonic distortion (THD)	< 5% at rated power	
No-load power consumption	< 30W	
Input DC voltage range	90 to 108 V (96 V Nominal)	
Maximum input DC current	60 A	180 A max.
<b>PV inputs</b>		
Number of PV string connections	2	6
Number of MPP tracking units	2	6
PV-string disconnect switches	integrated in system enclosure; two switches for 6 PV-strings	
Maximum input voltage	500 VDC	500 VDC
Input voltage range (functional)	180 – 500 VDC	
Input MPP tracking range	240 – 400 VDC	
Input current per PV input	12.5 ADC max	
Maximum PV short circuit	14 ADC for a single MPPT	
Input power per PV input	3000 W max.	
Backfeed current to PV-Input	none	

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**Battery DC input / output**

DC circuit breaker	63 A, branch rated, 125 VDC	3 x 63A, branch rated, 125 VDC
Maximum charge current	25 A	75 A max.
Maximum discharge current	60 A	180 A max.
Output voltage range	93 - 105 V (96 V Nominal)	
Charge control	Voltage control with electronic current limitation	

**Recommended battery type** Lithium-iron (LiFeYPO4), 96 V, 180 Ah

Efficiency	
PV-input to inverter output	94 %
Battery to inverter output	94 %
Battery charge / discharge (LiFeYPO4)	96.5 %

**General specifications**

Product / shipping weight	16.4 kg (36.0 lb)	90 kg (198 lb)
Product dimensions (H x W x D)	258 x 224 x 410 mm 10.16 x 8.82 x 16.14 in	886 x 813 x 508 mm 34.9 x 32.0 x 20 in NEMA Type 1 indoor
Degree of protection		
Operating air temperature range	0°C to 50°C (32°F to 122°F); linear power deration from 35°C to 50°C (95°F to 122°F) 50%	

**Warranty** 10 Years 10 Years

**Certifications**

Safety	UL1741
Interconnect	IEEE 1547, IEEE 1547.1
Battery	UL 1642

AVAILABLE AT:



Complete system dimensions ( H x W x D )  
70 inches x 32 inches x 20 inches

