



## Features

- 1 Using the latest LiFePO4 cell technology, we benefit from a lower running temperature than NiMh cells creating a safer running environment.
- 2 100% remote system control, this results in maximised efficiency on the charge and discharge cycles.
- 3 Realization of Demand Side Response. Battery discharge rate and duration at peak load times, all from a centralized location. Combined with Day ahead forecasting allows planned efficiency to mirror the grid demands.
- 4 Grid Friendly. active power control when the grid need support.
- 5 Grid friendly, reactive power balanced locally.
- 6 Central remote maintenance, monitoring and management. Negating costly site visits.
- 7 G59/G83. In accordance with G59/G83 our system isolates to off grid mode when necessary.
- 8 Emergency load design, for when the grid fails to support continued power to essential circuits.

Model Specifications	HY2.5-30-001	HY5.0-30-001
<b>Output Data (AC)</b>		
Nominal AC output power	2500W	5000W
Max.AC apparent power	2500VA	5000VA
Max. output current	10.8A	21.7A
AC nominal voltage; range	20V/230V/240V; 180Vac-280Vac	
AC grid frequency; range	50,60Hz;±5 Hz	
Power factor at rate power	1	
Power factor	0.9leading...0.9lagging	
THDi	<3%	
AC connection	Single phase	
<b>Battery</b>		
Battery type	Lead-acid or Li-ion	
Norminal voltage	48V	
Battery capacity	>=100Ah(requirement specific)	
Energy	4.88kWh	
Max. discharging /charging power	2500W / 2500W	5000W / 5000W
Charging curve	3-stage adaptive with maintenance	
Operating voltage range	46-57V	
Max. charging/discharging current	50A / 50A	100A / 100A
<b>Backup Output</b>		
Output rated power	3000VA	5000VA
Output voltage	230Vac ±2%, 50Hz (60Hz Optional)±0.2%, THDv<3%(linear load)	
<b>Efficiency</b>		
Max. efficiency	97%	97.10%
Euro - eta	96.50%	96.50%
MPPT efficiency	99.50%	99.50%
Protection Devices	DC reverse polarity protection, DC switch rating for each MPPT, Output over current protection , Output overvoltage protection-varistor, Ground fault monitoring, Grid monitoring, Integrated all - pole sensitive leakage , current monitoring unit	
<b>General Data</b>		
Dimensions (W / H / D)	495*420*165mm	610*420*165mm
Weight	24kg	28kg
Operating temperature range	60°c and 140°f	
Noise emission (typical)	≤ 25 dB(A)	
Altitude	Up to 2000m (6560ft) Without power derating	
Relative humidity	95%	
Consumption: operating (standby) / night	<5W / < 0.5 W	
Topology	Transformerless	
Cooling concept	Natural	
Environmental protection rating	IP65	
<b>Features</b>		
DC connection	H4/MC4	
AC connection	Screw terminal	
Display	LED	
Interfaces: Wi-Fi/USB/GPRS/RS485	Opt/Yes/Opt/Yes	
Warranty: 5 years / 10 years / 15 years	Yes/Opt/Opt	
Certificates and approvals	CE,IEC 62109-1&2, VDE 0126-1-1,G83/2, AS4777&AS/NZS 3100	