



500/600K

AC (On-Grid)
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AC (On-Grid)		
Max Output Power [kVA]	550	
Rated Power [kW]	500	
Rated Voltage [V]	400	
Rated Current [A]	722	
Voltage Range [V]	320~460	
Rated Frequency [Hz]	50/60	
Frequency Range [Hz]	45~55/55~65	
THDi[%]	<3	
Power Factor	1lagging~1leading	
AC Connection	3W+N+PE	
Transformer Ratio	315/400	
AC (Off-Grid)		
Max Output Power [kVA]	550	
Rated Power [kW]	500	
Rated Voltage [V]	400	
Rated Current [A]	722	
THDu[%]	≤1% linear; or ≤5% non-linear	
Rated Frequency [Hz]	50/60	
Overload Capacity	110% (5 minutes per 15 minute intervals)	
Photovoltaic Input		
Max. PV Input Voltage [V]	750	
Max. PV Power [kW]	600/660/720	
MPPT Voltage Range [V]	450-650	
String Voltage Constraints	Voc to be less than min battery voltage	
Battery		
Battery Voltage Range [V]	600~850	
Max. Charging Power [kW]	600/660/720	
General Data		
Dimension - H x W x D [mm]	2050x600x720 (x2) + 2050x1600x1050	
Weight[kg]	3265/3295/3325	
Operating Temperature [°C]	-30 to +55°C	
Relative Humidity	0~95% (non-condensing)	
Ingress Protection	IP20	
Noise Emission [dB]	<70	
Altitude [m]	5 000 (derating above 3 000)	
Cooling	Air Cooling	
Display and Communication		
Display	LCD touch-screen	
BMS Communication	RS485, CAN	
EMS Communication	RS485, TCP/IP	
Certificates	EN62109-1/-2, EN62477-1, EN61000-6-2, EN61000-6-4, South Africa NRS097-2-1:2017, Pakistan & India IEC61727, IEC62116,IEC 61683	

Notes to Specification Sheet

- 1. MPPT Charge Controllers are an optional extra for all HPS Inverters. The HPS 250 and HPS 500 require an additional MPPT Charge Controller Cabinet to house the MPPT Charge Controllers.
- 2. HPS 250 and HPS 500 do not have an internal bypass switch.
- 3. Any motors exceeding 7% of the selected HPS inverter's power rating must be fitted with a VSD. The total connected inductive load without VSD's may not comprise more than 15% of the HPS inverter's rated power.
- $\textbf{4.} \ \mathsf{Paralleling} \ \mathsf{up} \ \mathsf{to} \ \mathsf{4} \ \mathsf{inverters} \ \mathsf{is} \ \mathsf{possible} \ \mathsf{BUT} \ \mathsf{each} \ \mathsf{inverter} \ \mathsf{must} \ \mathsf{have} \ \mathsf{its} \ \mathsf{own} \ \mathsf{battery} \ \mathsf{DC} \ \mathsf{bus}.$

DISTRIBUTORS AND RESELLERS

Contact your nearest Accredited Freedom Won Distributor or Accredited EPCs for further sales and technical support.



Wiring Diagram

