



## HPS500

<b>AC (On-Grid)</b>	
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
<b>AC (Off-Grid)</b>	
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)
<b>Photovoltaic Input (MPPT Charge Controllers Optional)</b>	
Max. PV Input Voltage [V]	750
Max. PV Power [kW]	60-600
No. of MMPT Charge Controllers	1-10
MPPT Voltage Range [V]	450-650
String Voltage Constraints	Voc to be less than min battery voltage
<b>Battery</b>	
Battery Voltage Range with DC Coupled [V]	600-850
Battery Voltage Range without DC Coupled [V]	500-850
Max. Charging Power [kW]	60-600
<b>General Data</b>	
Dimension - H x W x D [mm]	2050x600x720 (x2)+ 2050x1600x1050
Max. Weight [kg]	Inverter: 2665   Full Cabinet: 660
Operating Temperature [°C]	-30 to +55°C
Relative Humidity	0-95% (non-condensing)
Ingress Protection	IP20
Noise Emission [dB]	<70
Altitude [m]	5000 (derating above 3000)
Cooling	Air Cooling
<b>Display and Communication</b>	
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 HPS250 and HPS500 require an additional MPPT Charge Controller Cabinet to house the MPPT Charge Controllers.
2. HPS250 and HPS500 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 VSDs may not comprise more than 15% of the HPS inverter's rated power.
4. Paralleling up to 4 inverters is possible BUT each inverter must have its own battery DC bus.
5. Weights and dimensions are based on the inclusion of the maximum number of MPPT charge controller modules.

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Wiring Diagram

