



BLACK DRAGON INVERTER

Data sheet



Off Grid Solar Hybrid Inverter operate without Battery

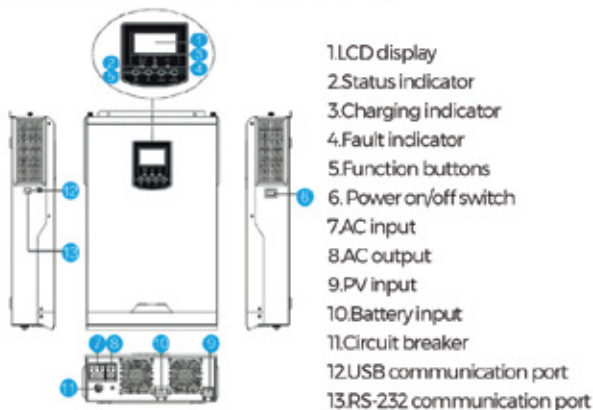
① HY VMII Series

This is a multi functional inverter/charger, combining functions of inverter, solar charger and battery charger to offer uninterruptible power support in portable size. Its comprehensive LCD display offers user-configurable and easy-accessible button operation such as battery charging current, AC/solar charger priority, and acceptable input voltage based on different applications.

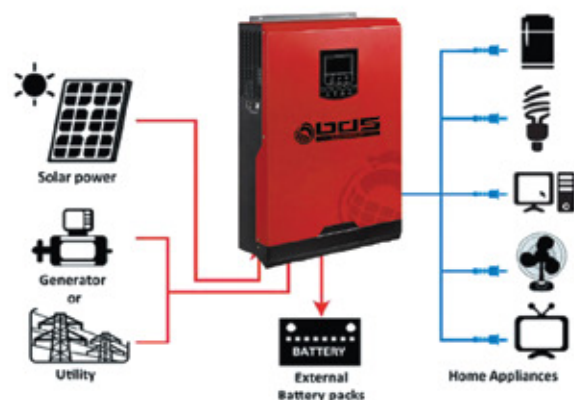
② Main Features

1. High efficiency pure sine wave inverter(PF=1);Wide PV input range (120V dc-500V dc) 80A MPPT SCC; Intelligent 3 stage 60A AC battery charger.
2. Surges to 2X continuous power for 5 seconds for motor loads.
3. Intelligent functionality enables utility and solar input prioritization.
4. Wide utility input range (90V ac ~280Vac) for unreliable grid even in the most challenging environments.
5. Field serviceable with replacement boards and spare parts.
6. Monitor, troubleshoot, or communication with USB/RS 232.
7. System configures quickly into compact, wall-mounted system.
8. This series inverters can work without batteries when there is the sun.

③ Product Overview



④ Solar System Connection



Back View



Technical Specifications:

Model	HY3222VMII	HY3522VMII	HY5032VMII	HY5532VMII
RATED POWER	3200VA/3200W	3500VA/3500W	5000VA/5000W	5500VA/5500W
INPUT				
Voltage	230 VAC			
Selectable Voltage Range	170–280 VAC (For Personal Computers) ; 90–280 VAC (For Home Appliances)			
Frequency Range	50 Hz/60 Hz (Auto sensing)			
OUTPUT				
AC Voltage Regulation (Batt. Mode)	230 VAC \pm 5%			
Surge Power	6000VA	7000VA	10000VA	11000VA
Efficiency (Peak)	90%–93%			
Transfer Time	10 ms (For Personal Computers) ; 20 ms (For Home Appliances)			
Waveform	Pure sine wave			
BATTERY				
Battery Voltage	24 VDC		48 VDC	
Floating Charge Voltage	27 VDC		54 VDC	
Overcharge Protection	33 VDC		63 VDC	
SOLAR CHARGER & AC CHARGER				
Max. PV Array Open Circuit Voltage	500VDC		500VDC	
Max. PV Array Power	120–450VDC		120–450VDC	
MPP Range @operating Voltage	4000 W		5000 W	
Max. Solar Charge Current	80 A	100 A	80 A	100 A
Max. AC Charge Current	60 A		60 A	
Max. Charge Current	100 A		100 A	
PHYSICAL				
Dimension, D x W x H (mm)	115 x 300x 400			
Net Weight (kgs)	9		10	
Communication Interface	USB/RS232/RS485/Bluetooth/Dry-contact			
ENVIRONMENT				
Humidity	5% to 95% Relative Humidity (Non-condensing)			
Operating Temperature	–10° C to 50° C			
Storage Temperature	–15° C to 60° C			

Approximate Back-Up Time Table:

Model	Load (VA)	Backup Time @24Vdc 100Ah(min)	Backup Time @24Vdc 200Ah(min)
3.2KVA	300	359	880
	1500	54	131
	3000	22	54
Model	Load (VA)	Backup Time @48Vdc 100Ah(min)	Backup Time @48Vdc 200Ah(min)
5KVA	500	490	1030
	2500	72	172
	5000	32	72

Note: Product specifications are subject to change without further notice.

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FOR A BRIGHTER FUTURE



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