

Off Grid Solar Hybrid Inverter



HY3022VM



HY3022VMN / HY3022VMN PLUS /
HY5032VM / HY5032VMN



HYB5032M / HYB5032MN

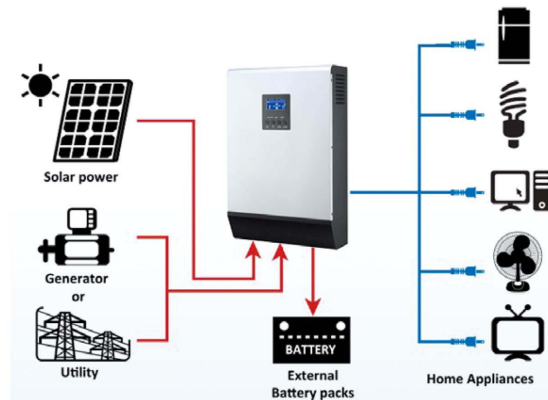
HY MPPT Series

This is a multi-function inverter/charger, combining function of inverter, solar charger and battery charger to offer uninterruptible power support with 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.

Features:

1. Pure sine wave inverter
2. Built-in MPPT solar charge controller
3. Selectable input voltage range for home appliances and personal computers
4. Selectable charging current based on applications
5. Configurable AC/Solar input priority via LCD setting
6. Compatible to mains voltage or generator power
7. Auto restart while AC is recovering
8. Overload and short circuit protection
9. Smart battery charger design for optimized battery performance
10. Cold start function
11. Parallel operation with up to 9 units only available for 5KVA (HYB5032M / HYB5032MN)

Solar System Connection



Back Panel



High Frequency Solar Inverter

Technical Specifications:

Model	HY3022VM HY3022VMN	HY3022VMN PLUS	HY5032VM HY5032VMN	HYB5032M HYB5032MN	
RATED POWER	3000VA/2400W 3000VA/3000W	3000VA/3000W	5000VA/4000W 5000VA/5000W	5000VA/4000W 5000VA/5000W	
Parallel Capacity	No	No	No	Yes, 9pcs	
Input	voltage	230VAC			
	selectable voltage range	170~280VAC (for personal computers) 90~280VAC (for home appliances)			
	Frequency range	50Hz/60Hz (auto sensing)			
Output	AC voltage regulation (Batt.mode)	230VAC ± 5%			
	Surge power (5 seconds)	6000VA	6000VA	10000VA	10000VA
	efficiency (peak)	93%			
	transfer time	10ms(for personal computers); 20ms (for home appliances)			
	waveform	pure sine wave			
	Battery & AC charger	battery voltage	24VDC	24VDC	48VDC
	floating charge voltage	27VDC	27VDC	54VDC	54VDC
	overcharge protection	33VDC	33VDC	63VDC	60VDC
	Max. AC charge current	25A	60A	60A	60A
	MAX PV array power	1000W	1500W	3000W	4000W
	MPPT range@ operating voltage	30~80V	30~115V	60~115V	60~115V
	maximum PV array open circuit voltage	102VDC	145VDC	145VDC	145VDC
	Max. Solar charge current	40A	60A	60A	80A
	Max. Total charge current	60A	120A	120A	140A
Physical	maximum efficiency	98%			
	standby power consumption	2W			
operating Environment	Dimension, D*W*H(mm)	95*240*316	100*272*385	155*295*455	155*295*455
	Net weight (kgs)	7KG	7KG	13KG	13KG
	humidity	5%~95% relative humidity (non-condensing)			
	operating temperature	0°C ~55°C			
	storage temperature	-15°C ~60°C			

Approximate Back-Up Time Table:

Model	Load (VA)	Backup Time @24Vdc 100Ah(min)	Backup Time @24Vdc 200Ah(min)
3KVA	300	449	1100
	1500	68	164
	3000	28	67

Model	Load (VA)	Backup Time @48Vdc 100Ah(min)	Backup Time @48Vdc 200Ah(min)
5KVA	500	613	1288
	2500	90	215
	5000	40	90

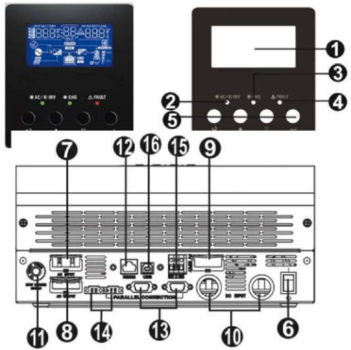
Note: Product specifications are subject to change without further notice.

3 Phases Off Grid Solar Hybrid Inverter



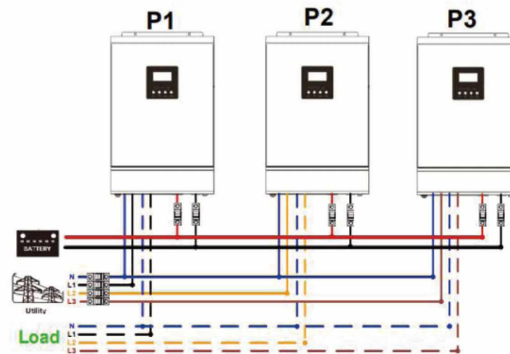
15KVA=5KVA x 3pcs Parallel

LCD Display Information



1. LCD Display
2. Status indicator
3. Charging indicator
4. Fault indicator
5. Function buttons
6. Power on/off switch
7. AC input
8. AC output
9. PV input
10. Battery input
11. Circuit breaker
12. RS232 communication port
13. Parallel communication cable(only for parallel model)
14. Current sharing cable(only for parallel model)
15. Dry contact
16. USB communication port

Parallel Connection



Package Contents



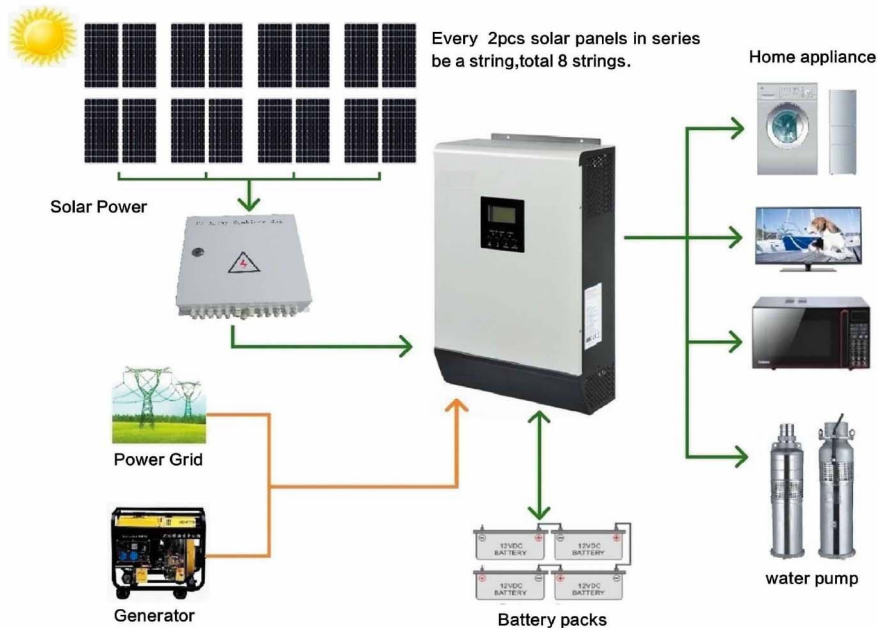
High Frequency Solar Inverter

Technical Specifications:

Model		3PHYB15KW	3PHYB30KW	3PHYB45KW
Rated power		15KW	30KW	45KW
Input	voltage	380VAC/230VAC		
	selectable voltage range	294-420VAC(for 3 phases) 90-280VAC (for single phase)		
	Frequency range	50Hz/60Hz (auto sensing)		
Output	AC voltage regulation (Batt.mode)	Three Phases380VAC ± 5% /single phases 230VAC ± 5%		
	Surge power (5 seconds)	30000VA	60000VA	90000VA
	efficiency (peak)	93%		
	transfer time	10ms(for personal computers); 20ms (for home appliances)		
	waveform	pure sine wave		
Battery& AC charger	battery voltage	48VDC		
	floating charge voltage	54VDC		
	overcharge protection	62VDC		
	maximum charge current	60A per way		
	MAX PV array power	5000W*3	5000W*6	5000W*9
	MPPT range@ operating voltage	60-115V		
	maximum PV array open circuit voltage	145VDC		
	MPPT charging current	80A*3	80A*6	5000W*9
	maximum efficiency	98%		
	Physical	standby power consumption	2W*3	2W*6
Dimension, D*W*H(mm)		155*295*455*3	155*295*455*6	155*295*455*9
operating Environment	Net weight (kgs)	39KG	78KG	117KG
	humidity	5%-95% relative humidity (non-condensing)		
	operating temperature	0°C -55°C		
	storage temperature	-15°C -60°C		

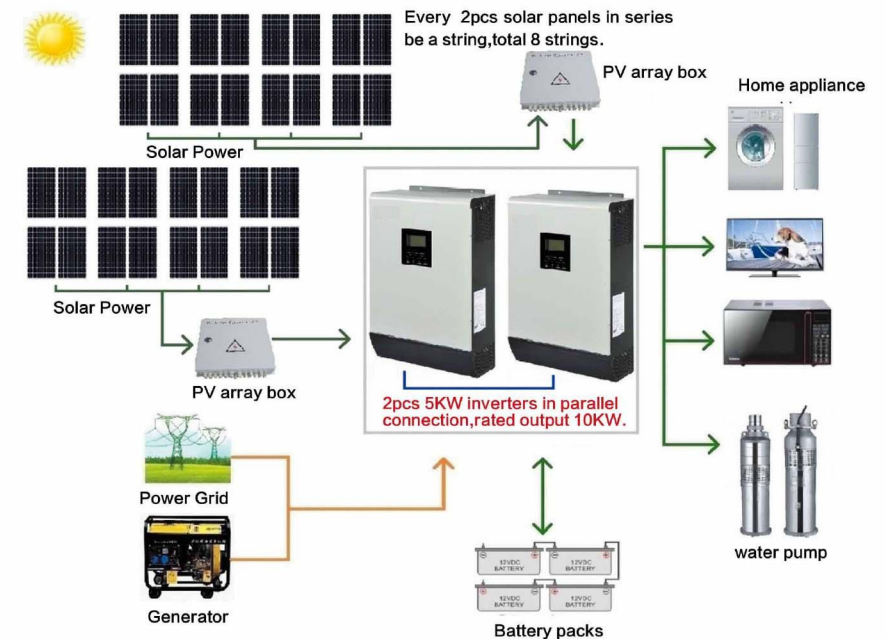
5KW Off Grid Solar Power System

Items	Description	Quantity	Price
Solar panel	300W 31V Mono Solar Panel	16pcs	
PV array box	8 strings input PV array combiner box	1pc	
Inverter with MPPT 80A Solar controller	HYB5032MN 5KW 48V hybrid solar inverter	1pc	
Battery	Deep Cycle battery 12V 200Ah	4pcs	
Solar mounting brackets	Aluminium brackets can mount 2pcs solar panels	8sets	
Solar cable & connectors	100m 4mm2 solar cable & 8sets MC4 connectors	100m+8sets	



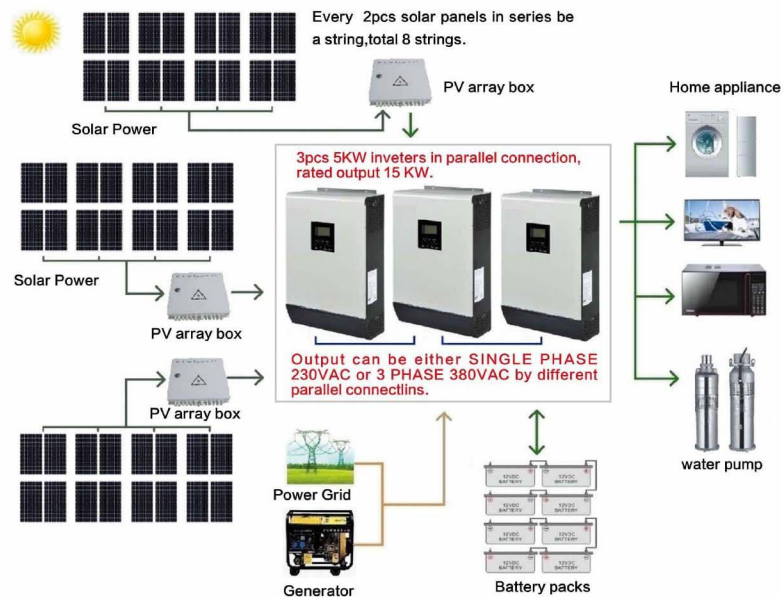
10KW Off Grid Solar Power System

Items	Description	Quantity	Price
Solar panel	300W 31V Mono Solar Panel	32pcs	
PV array box	8 strings input PV array combiner box	2pcs	
Inverter with MPPT 160A Solar controller	HYB5032MN 5KW 48V hybrid solar inverter	2pcs	
Battery	Deep Cycle battery 12V 200Ah	8pcs	
Solar mounting brackets	Aluminium brackets can mount 2pcs solar panels	16sets	
Solar cable & connectors	200m 4mm2 solar cable & 16sets MC4 connectors	200m+16sets	



15KW Off Grid Solar Power System

Items	Description	Quantity	Price
Solar panel	300W 31V Mono Solar Panel	48pcs	
PV array box	8 strings input PV array combiner box	3pcs	
Inverter with MPPT 240A Solar controller	HYB5032MN 5KW 48V hybrid solar inverter	3pcs	
Battery	Deep Cycle battery 12V 200Ah	12pcs	
Solar mounting brackets	Aluminium brackets can mount 2pcs solar panels	24sets	
Solar cable & connectors	300m 4mm2 solar cable & 24sets MC4 connectors	300m+24sets	



30KW 3 Phase Off Grid Solar Power System

Items	Description	Quantity	Price
Solar panel	300W 31V Mono Solar Panel	96pcs	
PV array box	8 strings input PV array combiner box	6pcs	
Inverter with MPPT 480A Solar controller	HYB5032MN 5KW 48V hybrid solar inverter	6pcs	
Battery	Deep Cycle battery 12V 200Ah	24pcs	
Solar mounting brackets	Aluminium brackets can mount 2pcs solar panels	48sets	
Solar cable & connectors	300m 4mm2 solar cable & 48sets MC4 connectors	600m+48sets	

