

Solar Hybrid 1-20kVA



Specifications

- Auto priority logic
- Pure Sine Wave output
- Phase reversal protection
- Auto wakeup & sleep mode
- High efficiency
- For long backup time
- Intelligent charger ensuring more battery life
- 10% more solar energy by using MPPT charger
- Overload, short circuit protection and auto recovery
- Battery (DC) cold start
- Genset compatibility
- 2 years warranty



Battery pack



Applications



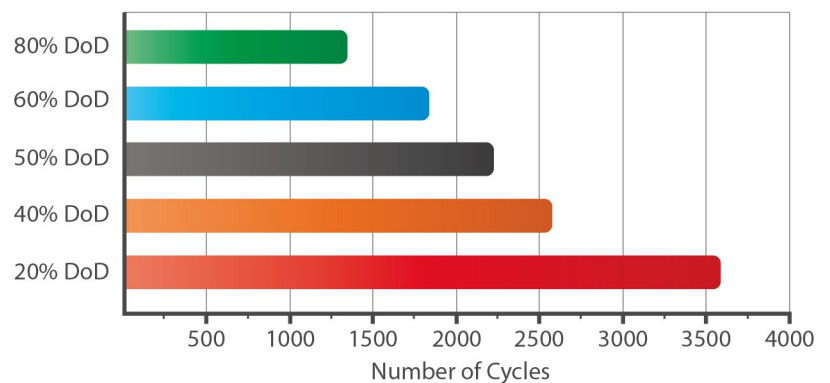
Working Principle

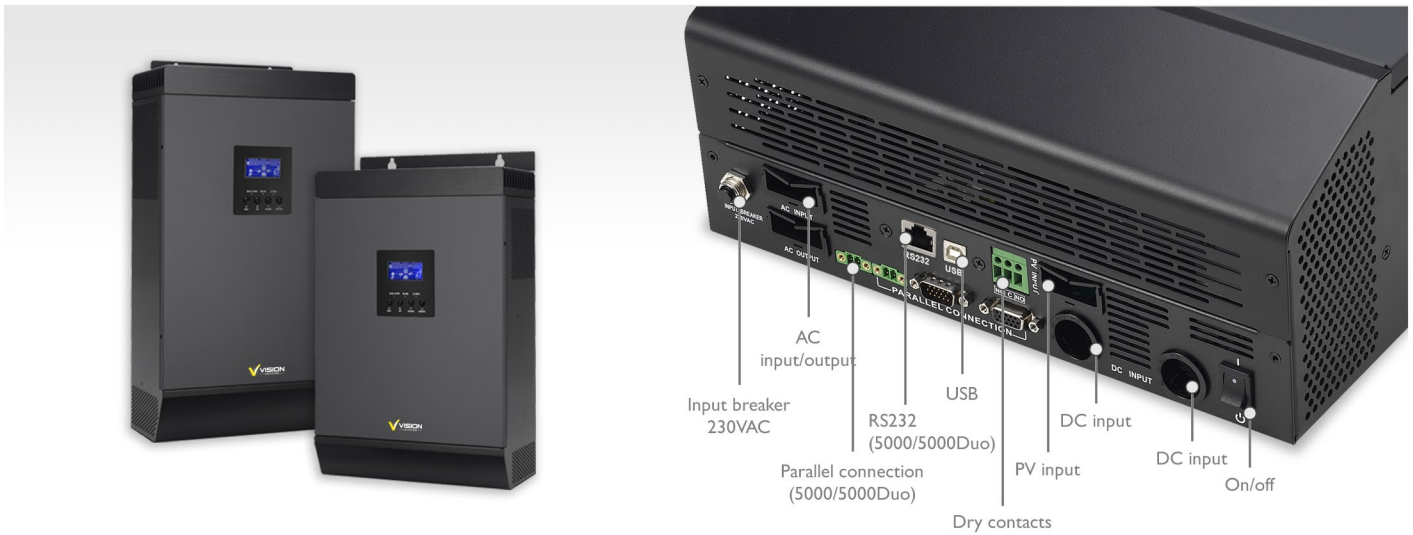
During normal day operation, the connected load is powered by solar energy. If the solar energy is not strong enough, all missing energy is supplied by the batteries. If both energies are not available, the system automatically switches to normal AC supply or genset.

What makes the difference ?

Our VRLA Gel deep cycle batteries are conform to the cycles use test norm IEC61427. The batteries still provide 100% of the full capacity in Ampere-hour (Ah) after 148 cycles.

Different DoD discharge cycles life:





Hybrid solar UPS	Model			
	1000	2000	3000	5000/5000Duo
— Input	90-280Vac			
Voltage range	50/60Hz (auto-sensing)			
Frequency	Pure Sine Wave			
— Output	230Vac +/-5			
Max. power	1000VA	2000VA	3000VA	5000VA
Max. power AC	1000W	1600W	2400W	4200W
Output voltage	<5%			
Harmonic distortion (THDi)	50/60Hz			
Frequency	9A	17A	25A	43A
Max. output current	120% for 180sec / 150% for 3sec			
Overload in bypass mode	110% for 60sec / 130% for 30sec			
Overload in battery mode	— Charger			
Max. PV power	900W	3000W	3000W	3000W/6000W
MPPT voltage min/max - Voc	60/88Vdc - 102Vdc	60/115Vdc - 145Vdc		
Max. charge current	18A	60A		60A/120A
Max. efficiency	98% - standby power consumption 2W			
— Battery (external)	48Vdc			
Battery voltage	15A			
Max. AC charger	50A		60A	60A
Max discharge current	48Vdc 300Ah		48Vdc 400Ah	48Vdc 800Ah
Battery capacity max.	57Vdc			
High voltage alarm	58,5Vdc			
Shutdown voltage	44Vdc			
Low voltage alarm	40Vdc			
Shutdown undervoltage	— Environment			
— Environment	IP20			
Protection degree	0-45°C		0-55°C	
Operating temperature	< 50dB		< 55dB	
Audible noise at 1m	0 to 90% non-condensing		5 to 95% non-condensing	
Relative humidity	0-2000m			
Altitude	— Communication			
— Communication	USB including Software			
Communication port	— Physical (UPS)			
— Physical (UPS)	105x275x360		145x300x480	
Dimensions (DxWxH), mm	7kg		13kg	
Net weight (only Hybrid UPS)	12kg		14kg/17kg	
Parallel kits	— Protection			
— Protection	Overvoltage, short-circuit, overload, battery deep discharge			
Input/output	— Options			
— Options	2-4x250Wc		4-24x250Wc	
Solar panel kits	48Vdc 24-100Ah		48Vdc 65-800Ah	
Battery kits	48Vdc 100-300Ah		Up to 4 units	
Parallel kits				

HYBRID