Solverte

Three Phase Hybrid Inverter

Hybrid inverters can convert direct current into alternating current and store energy in batteries.Can be used to optimize self-consumption. Batteries can store it for future use or feed it into the public grid. The working mode depends on the photovoltaic energy and user preferences.For example, during peak electricity usage periods, inverters can prioritize the use of electricity from batteries to reduce the burden on the power grid. When the electricity price on the grid is low, inverters can store excess electricity for future use.



Product Core Highlights

- IP66 high protection level
- Supports up to 16 devices running in parallel
- Maximum 50A battery charging and discharging current
- The critical load UPS and off grid switching time is less than 10ms
- Support diesel engine access
- Support three-phase unbalanced loads

HOUSEHOLD ENERGY STORAGE PRODUCTS

Solverte

Product Model	ESS1-15K3P-02-HV-F	ESS1-20K3P-02-HV-F	ESS1-20K3P-02-HV-F
Input DC (PV)			
Recommended max.PV power	18kW	22.5kW	30kW
Max. input voltage	1000V		
Rated input voltage	620V		
MPPT voltage range	200-850V		
Continuous input current	32A/32A		
MPPT number/Max.input stings number	2/4		
Batteries			
Input/Output DC(Battery)	Lithium batteries		
Battery voltage range	120-600V		
Max. charge/discharge power	12kW	15kW	20kW
Max. charge/discharge current	50A		
Communication mode	RS485/CAN		
Charging curve	Three-paragraph		
AC(Off Grid)			
Max.output power	12kW	15kW	20kW
Switch time of gnid-connected and off-grid	<10ms		
THDi	<2%(Linear load)		
AC(On Grid)			
Rated output power	12kW	15kW	20kW
Rated grid output voltage	3L/N/PE, 380V/400V		
Rated grid output frequency	50Hz/60Hz		
Max. output current	25A		
Max. input current	34.1A		
Power factor	>0.99(0.8 leading ...0.8 lagging)		
THDi	<2%(Full load)		
Efficiency			
Max. efficiency	>97.5%		
MPPT effciency	>99.5%		
Protection function			
Island protection	Available		
Input Protection for reverse connection	Available		
100% three-phase unbalanced load	Available		
AFCI protection	Optional		
System Data			
Maximum number of parallel machines	16		
Communication Port	RS485/WIFI(Optional)/4G(Optional)/LAN(Optional)		
Dimensions	567mmx497mmx237mm		
Weight	29kg		31.6kg
Operating ambient temperature	-40 ~ +60℃ (>45 derating)		
Degree of protection	IP66		
Cooling concept	Natural		Intelligent air-cooled
AC-Input			
Rated Voltage	3L/N/PE 380/400V	3L/N/PE 380/400V	3L/N/PE 380/400V
Rated Frequency	50/60Hz	50/60Hz	50/60Hz
Max Input Current	27.3A	34.1A	45.5A