Single-phase low-voltage hybrid inverter

6-8kW

- Protection Rating: IP66 high protection level
- Low Voltage Startup at 60V
- Overload Capacity:2times the rated load
- 10ms off-grid switching
- Parallel Operation Support:up to 12 units can be connected in parallel
- Battery-Less Startup Capability



Model	ESS2-6K1P-02-LV-F	ESS2-8K1P-02-LV-F
PV Input		
Max.PV Power	12kW	14kW
Max.Input Voltage	500V	
Rated Input Voltage	350V	
Start-up Voltage	60V	
MPPT Voltage Range	60-425V	
Max.Input Current	18A/18A	20A/20A
Max.Short Circuit Current	25A/25A	27A/27A
MPPT Number/Max.Input Strings Number	2/2	
Battery Input/Output		
Battery Voltage Range	40-60V	
Max. Battery Charge/Dischage Current	135A/135A	150A/150A
Max. Battery Charge/Dischage Power	6.6kW/6.6kW	8kW/8kW
Communication	RS485/CAN	
Inverter Output		
Rated Output Power	6.6kW	8kW
Max.Apparent Output Power	6.6kVA	8kVA
Rated Output Current	27.3A	34.8A
EPS Switch Time	<10ms	
Rated Output Voltage/Frequency	L/N/PE 220V/230V/240V 50Hz/60Hz	
Power Factor	0.8leading...0.8lagging	
THDi	<2%	
Grid Input		
Max.Input Power	9kW	11kW
Max.Input Current	40A	50A
Frequency Range	40-70Hz	
Input Voltage	L/N/PE 220V/230V 50Hz/60Hz	
EPS Port		
Max.Output Power(Hybrid)	9kW	11kW
Max.Output Power(No Grid)	6kW	8kW
Max.Output Current(Hybrid)	40A	50A
Max.Output Current(No Grid)	28.7A	34.8A
Smart Port		
Work Mode	Second Load/Generator Input	
Max.Input/Output Power	8kW	11kW
Max.Input/Output Current	40A	50A
Rated Voltage/Frequency	L/N/PE 220V/230V/240V 50Hz/60Hz	
System		
Display&Operate	3.5' LCD & Button	
Max.Efficiency	97.5%	
International Protection Code	IP66	
Amvient Temperature	- 40°C~60°C (>45°Cderating)	
Humidity	0-100% (No Condensation)	
Cooling Concept	Forced-air	
Three Phase Parallel / Max.Parallel	Yes / 12 sets	
Decibels	<50dB	<60dB
Inverter Main Size(L*W*H)	420*330*170mm (Excluding Lugs and Terminals)	
Inverter Net Weight	14kG	
Function		
DC-side Insulation Monitoring	Yes	
Anti-Islanding Protection	Yes	
Anti-Reflux	CT / METER	

Single-phase low-voltage hybrid inverter

10-12kW

- Protection Rating: IP66 high protection level
- Low Voltage Startup at 60V
- Overload Capacity:2times the rated load
- 10ms off-grid switching
- Parallel Operation Support:up to 12 units can be connected in parallel
- Battery-Less Startup Capability



Model	ESS2-10K1P-02-LV-F	ESS2-12K1P-02-LV-F
PV Input		
Max.PV Power	20kW	24kW
Max.Input Voltage	500V	
Rated Input Voltage	350V	
Start-up Voltage	60V	
MPPT Voltage Range	60-420V	
Max.Input Current	40A/40A	
Max.Short Circuit Current	50A/50A	
MPPT Number/Max.Input Strings Number	2/4	
Battery Input/Output		
Battery Voltage Range	40-60V	
Max. Battery Charge/Dischage Current	200A/200A	240A/240A
Max. Battery Charge/Dischage Power	10kW/10kW	12kW/12kW
Communication	RS485/CAN	
Inverter Output		
Rated Output Power	10kW	12kW
Max.Apparent Output Power	10kVA	12kVA
Rated Output Current	45A	55A
EPS Switch Time	<10ms	
Rated Output Voltage/Frequency	L/N/PE 220V/230V/240V 50Hz/60Hz	
Power Factor	0.8leading…0.8lagging	
THDi	<2%	
Grid Input		
Max.Input Power	15kW	18kW
Max.Input Current	65A	80A
Frequency Range	40-70Hz	
Input Voltage	L/N/PE 220V/230V 50Hz/60Hz	
EPS Port		
Max.Output Power(Hybrid)	15kW	18kW
Max.Output Power(No Grid)	10kW	12kW
Max.Output Current(Hybrid)	65A	80A
Max.Output Current(No Grid)	45A	55A
Smart Port		
Work Mode	Second Load/Generator Input	
Max.Input/Output Power	15kW	
Max.Input/Output Current	65A	
Rated Voltage/Frequency	L/N/PE 220V/230V/240V 50Hz/60Hz	
System		
Display&Operate	3.5' LCD&Button	
Max.Efficiency	97.5%	
International Protection Code	IP66	
Amvient Temperature	-25℃~60℃ (>45℃derating)	
Humidity	0-100% (No Condensation)	
Cooling Concept	Forced-air	
Parallel	12 sets	
Decibels	45dB	
Inverter Main Size(L*W*H)	400*220*580mm (Excluding Lugs and Terminals)	
Inverter Net Weight	25kG	