

SPS30/SPS35 Three-Phase String Inverter



Clenergy SPS30/SPS35 string inverters are designed for a three-phase power grid connection. The inverters use new silicon carbide power device and two-level topology to deliver maximum efficiency of 98.5%. Each inverter provides up to two Maximum Power Point Tracking (MPPT) and is suitable for long-term outdoor or other environment applications. The SPS30/SPS35 can be effectively used for rooftop, hillside, and ground-level photovoltaic power plants.

Features:

- ◆ High efficiency of up to 98.5%
- ◆ Use new type silicon carbide power device to improve performance and efficiency
- ◆ Double MPPT to improve generation capacity of PV cells
- ◆ Double CPU control system to improve inverter reliability
- ◆ Comprehensive protection function
- ◆ Integrating string current monitoring function and configuring standard DC input switch
- ◆ Standard Type II surge arrester
- ◆ Protection degree IP65

Model	SPS30	SPS35
INPUT DATA		
Input type: Ungrounded PV panel array		
Maximum input power	36KW	42KW
Maximum input voltage	1000V _{DC}	
Start up voltage	300V _{DC}	
MPPT voltage range	300V _{DC} to 950V _{DC}	
Full load MPPT voltage range	480V _{DC} to 800V _{DC}	580V _{DC} to 800V _{DC}
Max. input current	66A (33A per MPP string)	
PV array short-circuit current	80A (40A per MPP string)	
Number of MPPTs	2	
Max. number of PV strings per MPPT	4	
AC OUTPUT		
Input type: 3-phase 4-wire		
Nominal output power	30KW	35KW
Nominal AC voltage	3*230/400 V _{AC} +N+PE	3*277/480 V _{AC} +N+PE
AC voltage range	342~528 V _{AC}	
Grid frequency range	50/60Hz	
Max. output current	48A	
O/P current distortion	THD < 3% of rated current	
Power factor	> 0.99 @ Full power (adjustable: 0.8 leading ~ 0.8 lagging)	
General Data		
Maximum conversion efficiency	98.5%	
Euro Efficiency	98.2%	
Display	Dynamic graphics LCD	
PC connection	2*RS485(USB, GPRS, Ethernet and WiFi with optional communication converter)	
Protection degree	IP65	
Self power consumption at night	<1W	
Operation temperature	-25 to 60°C (>45°C derating)	

Mechanical	
Cooling	Forced air cooling (IP68 Fan)
Humidity	<95%, non-condensing
Acoustic noise level	<45dBA @ 1m
Altitude	< 3000m >3000m with derating
SIZE(PHYSICAL)/mm(D*W*H)	290*540*670
Weight (NET)/kg	60kg
Protection	
Anti-islanding protection	Yes
DC reverse connection protection	Yes
AC short circuit protection	Yes
Leakage current protection	Yes
DC Switch	Yes
DC Fuse	Yes
LVRT	Yes
Standards	
Standard Compliance	CQC, LVRT