

SPECIFICATIONS

Table 1 Line Mode Specifications

INVERTER MODEL	DS5500LP	EM-DS5500L
Input Voltage Waveform	Sinusoidal (utility or generator)	
Nominal Input Voltage	230Vac	
Low Loss Voltage	170Vac±7V (UPS) 90Vac±7V (Appliances)	
Low Loss Return Voltage	180Vac±7V (UPS); 100Vac±7V (Appliances)	
High Loss Voltage	280Vac±7V	
High Loss Return Voltage	270Vac±7V	
Max AC Input Voltage	300Vac	
Nominal Input Frequency	50Hz / 60Hz (Auto detection)	
Low Loss Frequency	40±1Hz	
Low Loss Return Frequency	42±1Hz	
High Loss Frequency	65±1Hz	
High Loss Return Frequency	63±1Hz	
Output Short Circuit Protection	Line mode: Circuit Breaker Battery mode: Electronic Circuits	
Efficiency (Line Mode)	>95% (Rated R load, battery full charged)	
Transfer Time	10ms typical (UPS); 20ms typical (Appliances)	
<p>Output power derating: When AC input voltage drops to 95V or 170V depending on models, the output power will be derated.</p>	<p>The graph illustrates the output power derating characteristics. The vertical axis represents Output Power, with specific levels for 50% Power and Rated Power. The horizontal axis represents Input Voltage, with key points at 90V, 170V, and 280V. The power output is zero until 90V, where it steps up to 50% of the rated power. From 90V to 170V, the power output increases linearly until it reaches the full Rated Power. From 170V to 280V, the output power remains constant at the Rated Power level.</p>	

Table 2 Inverter Mode Specifications

INVERTER MODEL	DS5500LP	EM-DS5500L
Rated Output Power	DS5500LP/5.5KW	EM-DS5500L/5.5KW
Output Voltage Waveform	Pure Sine Wave	
Output Voltage Regulation	230Vac±5%	
Output Frequency	60Hz or 50Hz	
Peak Efficiency	94%	
Overload Protection	5s@≥140% load; 10s@100%~140% load	
Surge Capacity	2* rated power for 5 seconds	
Nominal DC Input Voltage	48Vdc	48Vdc
Cold Start Voltage	46.0Vdc	46.0Vdc
Low DC Warning Voltage @ load < 20% @ 20% ≤ load < 50% @ load ≥ 50%	44.0Vdc 42.8Vdc 40.4Vdc	44.0Vdc 42.8Vdc 40.4Vdc
Low DC Warning Return Voltage @ load < 20% @ 20% ≤ load < 50% @ load ≥ 50%	46.0Vdc 44.8Vdc 42.4Vdc	46.0Vdc 44.8Vdc 42.4Vdc
Low DC Cut-off Voltage @ load < 20% @ 20% ≤ load < 50% @ load ≥ 50%	42.0Vdc 40.8Vdc 38.4Vdc	42.0Vdc 40.8Vdc 38.4Vdc

Table 3 Charge Mode Specifications

Utility Charging Mode		
INVERTER MODEL	DS5500LP	EM-DS5500L
Max Charging Current (PV+AC)	100Amp (@ $V_{I/P}=230V_{ac}$)	
MaxCharging Current (AC)	60Amp (@ $V_{I/P}=230V_{ac}$)	
Bulk Charging Voltage	Flooded Battery	58.4Vdc
	AGM / Gel Battery	56.4Vdc
Floating Charging Voltage	54Vdc	54Vdc
Overcharge Protection	63Vdc	63Vdc
Charging Algorithm	3-Step	
Charging Curve		
Solar Input		
INVERTER MODEL	DS5500LP	EM-DS5500L
Rated Power	5500W	5500W
Max. PV Array Open Circuit Voltage	500Vdc	
PV Array MPPT Voltage Range	120Vdc~450Vdc	
Max. Input Current	18A	18A
MaxCharging Current(PV)	100A	

Table 4 General Specifications

INVERTER MODEL	DS5500LP	EM-DS5500L
Safety Certification	CE	
Operating Temperature Range	-10°C to 55°C	
Storage temperature	-15°C~ 60°C	
Humidity	5% to 95% Relative Humidity (Non-condensing)	
Dimension (D*W*H), mm	448x295x105(122)	
Net Weight, kg	9.9(10.2)	9.9(10.2)

Datasheet has the following technical information:	DS5500LP, EM-DS5500L
Rated output apparent power (VA)	5.5KVA / 5.5KW
Rated output current (A)	23.9A
Max input DC voltage (V)	500VDC
Min input DC operating voltage range (V)	120VDC-450VDC
Input start-up voltage (V)	120VDC
MPPT voltage range (V) - for PV inverters only	120VDC - 450VDC
Max MPPT input current and max MPPT short circuit current (A)	Max. Input: 18A Isc: 100A
Max input PV power (For PV inverters only)	5500W
Rated or Max Charging Current (A) or Power (kW)	100A
Operating temperature range	-10°C - 55°C
IP rating	IP21
Inverter topology:	Non-Isolated
Over Voltage Category:	DC type: OVC II / AC type OVC III
Maximum altitude (optional if available in installation manual)	N/A
Inverter max efficiency	94%
Show the types (Chemistry) of batteries the inverter is compatible with.	AGM(default), Flooded, User-defined
Country of manufacture	China