

6.5 Trial operation

On completion of all electrical connections, follow the procedure below for the inverter to start up.

- (1) Ensure the inverter is connected correctly to the utility grid
- (2) Ensure the polarity of the PV module is correctly connected
- (3) Ensure the AC and DC terminals are firmly connected

7. Appendix A

7.1 Technical specifications

INPUT

Product model	SPE-1200W	SPE-600W	SPE-500W	SPE-400W	SPE-300W
DC input					
PV module power (STC) range (W)	1120-1400	490-735	460-630	360-460	230-360
DC input branch number	2	1	1	1	1
Max input power DC (W)	1280	630	530	425	320
Input STC Voc DC (V) *	150-200	80-115	18 - 28/26-38/39-52/50-76/80-115		
MPPT range(V)	105-170	56-97	13 - 24/18-33/27-45/35-64/56-97		
Max input current (A)	16	11	40/25/20 /12/8	33/22/16 /10/6	25/16/12 /7/5
AC output					
	China and /Europe specifications				
Max cont output power (W)	1200	600	500	400	300
Max cont output current (A)	5.45	2.73	2.27	1.82	1.38
Voltage AC (V)	220/230	220/230	220/230	220/230	220/230
Operating voltage range (V) *	180-260	180-260	180-260	180-260	180-260
Frequency AC (Hz)	50	50	50	50	50
Operating frequency (Hz) *	48-52	48-52	48-52	48-52	48-52

System Parameters

	United States/Taiwan specifications				
Max cont output power (W)	1200	600	500	400	300
Max cont output current (A)	10	5	4.17	3.34	2.55
Voltage AC (V)	120	120	120	120	120
Operating voltage range (V) *	94 - 140	94 - 140	94 - 140	94 - 140	94 - 140
Frequency AC (Hz)	60	60	60	60	60
Operating frequency (Hz) *	58-62	58-62	58-62	58-62	58-62
Other electrical properties					
Factor rating	>0.99	>0.99	>0.99	>0.99	>0.99
THD grid curren	<5%	<5%	<5%	<5%	<5%
Islanding protection	VAC;FAC	VAC;FAC	VAC;FAC	VAC;FAC	VAC;FAC
Working status indication	LED/LCD	RGB LED	RGB LED	RGB LED	RGB LED
Efficiency					
MPPT tracking efficienc	≥99%	≥99%	≥99%	≥99%	≥99%
Peak inverter efficiency	94%	94%	94%	94%	94%
Standby power consumption at night	<150mW	<150mW	<150mW	<150mW	<150mW
Mechanical Data					
Storage temperature range	- 20°C/+60°C				
Operating ambient temperature range	- 20°C/+60°C				
Dimensions (L x W x H,mm)	222*162*112	222*162*55			
Weight(KG)	2.5	1.3	1.3	1.3	1.3

Protection class	IP50	IP50	IP50	IP50	IP50
Cooling	Fan forced convection				
Other					
PV components	monocrystalline, polycrystalline, thin film solar panels				
communication	Wireless or RS485				
Design and operation of life	25 Years				
EMC Compliance	EN61000-6-1/EN6100-6-3				
Grid standards	VDE0126				
Safety Standards	EN50178				
* Can be adjusted according to customer requirements or selected					

Parts List

Accessory name	Quantity
Standard power cord	1 PC
Manual	1 PC

8. Appendix B

8.1 Quality assurance

(1) Warranty period

Convention shelf life in accordance with the contract of sale.