





Whether the grid is at your doorstep or 1000km away, the SP PRO Bi Directional Inverter charger can control and manage every aspect of your energy needs.

By incorporating PV Solar, Wind, Hydro or a Diesel Generator, you can be sure you will never be without power.

Product highlights

- Solar Hybrid (On Grid), Off Grid or Mobile and Marine operation
- Integrated Grid controller, choose from Self Consumption, Battery Storage or cheap electricity rates
- Integrated intelligent Generator controller, maximise system efficiency
- Minimum 63A transfer switch allows entire home to be connected
- Compatible with AC Coupled PV, reduces install costs with higher efficiency
- Easily configurable for Domestic or Commercial applications to maximise return on invesment

Single phase or Three phase

3kW up to 120kW

Up to 8 year warranty*

Backed by Australias most trusted manufacturer.





SP PRO SERIES SPECIFICATIONS	SPMC240	SPMC241	SPMC481	SPMC482	SPMC1201	SPLC1202			
Continuous Power and Charge Current	3 kW / 125 A	4.5 kW / 188 A	5 kW / 104 A	7.5 kW / 156 A	7.5 kW / 63 A	20 kW / 167 A			
at nominal DC & AC voltage @ 25 °C		Short Term Ratings @	25 °C						
30 seconds	7.5 KW	10.5 KW	12 KW	18 KW	18 KW	44 KW			
1 minute	5.4 KW	7.6 KW	8.7 KW	13 KW	13 KW	30 KW			
30 minute	4.2 KW	6.75 KW	7.0 KW	11.25 KW	11.25 KW	29 KW			
60 minutes	3.2 KW	4.7 KW	5.3 KW	8 KW	8 KW	24 KW			
Nominal battery voltage	24 V	24 V	48 V	48 V	120 V	120 V			
DC input voltage range (V d.c.)	20 - 34	20 - 34	40 - 68	40 - 68	100 - 170	100 - 170			
DC consumption: idle	6 W								
Ambient temperature operating range	-10°C to 60°C								
Peak Efficiency	95%	95%	96%	96%	97%	97.2%			
AC OUTPUT standalone									
Nominal voltage			240 VAC configura	ble 210 to 240 VAC					
Regulation (related to 40 °C ratings)	<2.25% droop @ 0-100% (load power) <3.5% @150%, <5% @ 200% (load power) <10% @ 300% (load rating)					<0.2% @ 100% <1.0% @ 150% <1.5% @ 200%			
THD	<3% @ 0-200% rated load								
Frequency	50 or 60 Hz +/-0.005% standalone								
AC SOURCE									
Nominal voltage	210 to 240 V a.c.								
Tolerance on nominal voltage	configurable: - 1% to -15%; + 1 to +10%								
Nominal input frequency	50/60Hz								
Tolerance on nominal frequency	configurable +/- 1% to 10%								
Generator can be started by:	battery SoC, DC voltage, battery load, unit temperature, time 8 remote control								
TRANSFER CONTACTOR									
AC transfer current capacity (internal)		63 A							
AC transfer current capacity (external)		Control provided by an optional 250A external contactor							
Max AC input source, (generator or grid) W		15 kW*				30 kW*			
Max total output to Load,						30 kW*			
AC source + inverter	15 kW* + inverter rating 30 k					30 KW"			
AC transfer time	"no-break" (< 1/2 cycle)								
Disconnect time if grid (source) fails	<= 30 ms								
OC Circuit Breakers			-			2 pole 250A			
Operating Temperature Range				to 60 °C					
Storage Temperature Range	-25 °C to 70 °C								
Max Grid Feed capacity	rated output (2 x rated output for KACO Managed AC Coupled)								
Battery temperature sensor				es					
Mid point battery voltage sensing			Y	es					
Inverter display	22 x LEDs with auto adjusting intensity. display indicates, charger status, useable battery capacity remaining, alarms, AC status. AC status LEDs powered from AC voltage. Generator control button, On button, Alarm silence button.								
Digital Control Inputs	4 off, 12V to 60V True, < 3V False								
Shunt Inputs	Two user definable: Sutable for current shunts rated at 25mV - 100mV and 25 A - 500 A								
Analogue Inputs	2 general purpose logged 0-60V -								
Relay Control Outputs	4 off: 60 V, 500 mA								
Digital Control Outputs	3 off: 60 V, 5 mA								
Communication Port 1	USB (slave) or RS232 or 3-phase sync (adjustable baud rate of up to 57,600)								
Communication Port 2	RS485 or RS232 (adjustable baud rate of up to 57600)								
	Managed KACO / Generic								
AC Coupling	20 kHz								
PWM modulation frequency				permanent					
PWM modulation frequency Memory retention of settings			•						
PWM modulation frequency Memory retention of settings Memory retention of logged data			perm	anent					
PWM modulation frequency Memory retention of settings Memory retention of logged data Data Storage			perm Up to 2	anent .5 years					
PWM modulation frequency Memory retention of settings Memory retention of logged data Data Storage SP LINK configuration and monitoring software			perm	anent .5 years					
PWM modulation frequency Memory retention of settings Memory retention of logged data Data Storage SP LINK configuration and monitoring software Dimensions h x w x d (mm)			perm Up to 2	anent .5 years		870 x 540 x 290			
PWM modulation frequency Memory retention of settings Memory retention of logged data Data Storage SP LINK configuration and monitoring software Dimensions h x w x d (mm) d = front to mounting surface)	35 ba	30 kg	perm Up to 2 stan 690 x 375 x 220	anent .5 years dard	42 ka				
Awm modulation frequency Memory retention of settings Memory retention of logged data Data Storage SP LINK configuration and monitoring software Dimensions h x w x d (mm) d = front to mounting surface) Mass (unpacked with wall mount)	35 kg	39 kg	perm Up to 2 stan	anent .5 years	42 kg	870 x 540 x 29			
PWM modulation frequency Memory retention of settings Memory retention of logged data Data Storage SP LINK configuration and monitoring software Dimensions h x w x d (mm) d = front to mounting surface) Mass (unpacked with wall mount) STANDARDS	35 kg	_	perm Up to 2 stan 690 x 375 x 220 40 kg	anent .5 years dard 42 kg	_				
PWM modulation frequency Memory retention of settings Memory retention of logged data Data Storage SP LINK configuration and monitoring software Dimensions h x w x d (mm) d = front to mounting surface) Mass (unpacked with wall mount) STANDARDS Safety (UPS)	35 kg	IEC 6204	perm Up to 2 stan 690 x 375 x 220 40 kg	anent .5 years dard 42 kg	_				
PWM modulation frequency Memory retention of settings Memory retention of logged data Data Storage SP LINK configuration and monitoring software Dimensions h x w x d (mm) d = front to mounting surface) Mass (unpacked with wall mount) STANDARDS Safety (UPS) EMC (Domestic limits)	35 kg	IEC 6204	perm Up to 2 stan 690 x 375 x 220 40 kg	anent .5 years dard 42 kg	ertificates	115 kg			
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PWM modulation frequency Memory retention of settings Memory retention of logged data Data Storage SP LINK configuration and monitoring software Dimensions h x w x d (mm) d = front to mounting surface) Mass (unpacked with wall mount) STANDARDS Safety (UPS) EMC (Domestic limits) EMC (Industrial limits) Grid Connect	35 kg	IEC 6204	perm Up to 2 stan 690 x 375 x 220 40 kg 	anent .5 years dard 42 kg 0-1-1:2003 with CB co	ertificates	115 kg			
PWM modulation frequency Memory retention of settings Memory retention of logged data	35 kg	IEC 6204	perm Up to 2 stan 690 x 375 x 220 40 kg 40-1-1:2002 / AS 6204 0.6.3:2007 - AS4777.2:2005, Certificate of S	anent .5 years dard 42 kg 0-1-1:2003 with CB co . AS4777.3:2005 Suitability, Ctick	ertificates	115 kg			
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