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
- 63A or 125A AC transfer contactor standard
- Compatible with AC Coupled PV, reduces install costs with higher efficiency
- Easily configurable for Domestic or Commercial applications to maximise return on investment

Single phase or Three phase
3kW up to 120kW
Up to 8 year warranty*
Backed by Australia’s most trusted manufacturer.

*Conditions apply see website for details
# SP PRO Series Specifications

## AC Outputs
- **Maximum Export Power**: Rated output (2 x rated output for KACO Managed AC Coupled)
  - Continuous: 3.0 kW, 4.5 kW, 5.0 kW, 7.5 kW, 7.5 kW, 15.0 kW, 20.0 kW
- **Max AC output from batteries**:
  - Continuous: 3.0 kW, 4.5 kW, 5.0 kW, 7.5 kW, 7.5 kW, 15.0 kW, 20.0 kW
  - 60 minutes: 3.2 kW, 4.7 kW, 5.3 kW, 8.0 kW, 8.0 kW, 18.0 kW, 24.0 kW
  - 30 minutes: 4.2 kW, 6.75 kW, 7.0 kW, 11.25 kW, 11.25 kW, 23.0 kW, 30.0 kW
  - 1 minute: 5.4 kW, 7.6 kW, 8.7 kW, 13.0 kW, 13.0 kW, 26.0 kW, 35.0 kW
  - 30 seconds: 7.5 kW, 10.5 kW, 12.0 kW, 18.0 kW, 18.0 kW, 33.0 kW, 44.0 kW
- **Max total output to Load, AC source + inverter**: 15 kW + inverter rating + 30 kW
- **Nominal voltage (true sine wave)**: 240 V AC configurable 210 to 240 V AC
- **Total harmonic distortion**: <3% @ 0-200% rated load
- **Frequency**: 50 or 60 Hz +/-0.005% No Grid

## AC Inputs
- **Nominal voltage**: 210 +/-15% to 240 +/-10% V AC
- **Nominal input frequency**: 50/60Hz configurable +/- 1% to 10%
- **AC transfer current capacity**: 63 A 3 125 A 3
- **Max AC input source, (generator or grid)**: 15 kW 4 30 kW 4
- **AC transfer time**: Typical <1/2 cycle
- **Max charging from Grid**: 3.0 kW, 4.5 kW, 5.0 kW, 7.5 kW, 7.5 kW, 15.0 kW, 20.0 kW

## DC Inputs
- **Rated DC input / DC voltage range (V DC)**: 24 V / 20 - 34, 48 V / 40 - 68, 120 V / 100 - 170
- **Battery capacity (range)**: Up to 10,000 Ah

## Efficiency
- **Peak Efficiency**: 95%, 95%, 96%, 96%, 97%, 97.2%, 97.2%
- **DC consumption: idle**: 6 W

## General
- **Disconnect time if grid (source) fails**: <= 30 ms
- **DC Circuit Breakers internal**: 2 pole 250A
- **Operating Temperature Range**: -10°C to 60°C
- **Inverter display indicators**: Charger status, Charge source, Usable battery capacity remaining, Alarms, AC status.
- **Renewable charging source**: KACO Managed AC Coupled, DC Renewable charge controller or Generic AC Coupled 1
- **Data logging storage**: Up to 2.5 years
- **Ambient temperature operating range**: -10°C to 60°C

## Features
- **Battery temperature / Mid point battery voltage**: Yes / Yes
- **Control Inputs**: 4 of, 12V to 60V True, <3V False
- **Shunt Inputs**: Two user definable, Suitable for 25 A - 1000 A current shunts at 25mV - 100mV
- **Analogue Inputs**: 2 general purpose logged 0x60V
- **Relay Control Outputs**: Relay: 4 of 60 VDC, 500 mA / Digital: 3 off 60 VDC, 5 mA
- **Communication Port 1**: USB (slave) or RS232 (adjustable baud rate of up to 57600)
- **Communication Port 2**: RS485 KACO Link or RS232 (adjustable baud rate of up to 57600)
- **Dual, Split & Three Phase compatible**: Yes with an SP PRO on each phase
- **Warranty**: 3 - 8 years (conditions apply see website for details)

## Standards
- **EMC (Domestic limits)**: EN 61000-6.3:2007 -
- **EMC (Industrial limits)**: EN 61000-6.4:2007 -
- **Grid Connect**: AS4777.2:2005, AS4777.3:2005
- **Certification**: Certificate of Suitability, Click, Ergon/Energex Standard
- **Protection**: IP43

## Options
- **Generator Backup On Grid / Off Grid**: Yes / Standard
- **WEIGHTS & DIMENSIONS**: Using optional Grid Fail Gen backup module / Yes - Standard
  - **Weight**: Packed / Unpacked with wall mount 39 kg / 35 kg, 45 kg / 39 kg, 45 kg / 40 kg, 54 kg / 42 kg, 52 kg / 42 kg, 160 kg / 113 kg, 163 kg / 115 kg
  - **Dimensions**: Packed / Unpacked h x w x d (mm): 810 x 500 x 350 / 690 x 375 x 220, 1080 x 740 x 650 / 870 x 540 x 290

---

1 Where AC rating of Generic inverter does not exceed the Maximum AC Grid Feed Power of the SP PRO
2 60 kW + inverter rating with optional external contactor
3 250 A with optional external contactor
4 60 kW with optional external contactor

All specifications at 25°C and rated DC input voltage except where otherwise stated. Specifications may change without notice see website.