

SP PRO SERIES

The Selectronic SP PRO SERIES has been designed from the ground up with the world market in mind. Using our 25 years of experience in the harsh Australian market, we have developed a product which will suit many different markets including; Off Grid, On Grid with back up, Marine, Mobile and Industrial. Featuring advanced thermal power management and super high speed digital signal processing, new standards have been set for reliability, features, surge capability and power density.

The SP PRO series will act as a low voltage grid feeding inverter and will provide back-up power to the load if grid electricity has failed. The unit can also be configured to operate as an Interactive Inverter Charger, with fast preset configurations for either mobile or remote power system use.



Features

- » Ratings @ 40°C
- » Low distortion sine wave Interactive Inverter Charger with grid feed ability
- » Advanced thermal techniques provide excellent high temperature performance
- » 63 amp AC transfer switch with anti-chatter protection
- » Grid feeds with excess renewable
- » "Grid Lockout" setting can allow battery charging "Off Peak"
- » Automatic changeover when grid fails without using a second inverter
- » World leading 300% surge capacity
- » True 100% charge capacity
- » Five stage battery charging with dual float points and adjustable temperature compensation
- » Battery mid point monitoring with automatic equalisation
- » Simple LED display, with the AC LEDs directly powered from the monitored voltage
- » Redundant safety disconnect for pluggable operation
- » Plug and play or fully configurable via computer
- » Eighteen months of logged daily totals
- » Four months of sampled data at 30 minute sample rate
- » Adjustable 30/15/10/5/1 minute sample rate
- » Easy to use configuration/ monitoring software supplied standard
- » "Partial state of charge" control can minimise generator run time
- » Superbly quiet
- » All PCBs conformal coated with mil spec silicone
- » 4 x addressable relay outputs and 3 x digital outputs
- » 4 x addressable digital inputs and 2 x analogue inputs
- » 2 x user definable shunt inputs
- » Low battery shutdown override in case of emergency
- » Discretionary load control
- » External solar regulator bypass function
- » 2 x serial ports with power for accessories
- » Variable speed fan with service alert
- » Lifetime monitored capacitors with service alert
- » Warranty, 5 yrs + 2 for SP PRO accredited installers
- » 100% Australian designed and manufactured
- » Field serviceable modular design*

*Conditions Apply

| SP PRO SERIES SPECIFICATIONS | | SPMC 241-AU | SPMC 481-AU | SPMC 482-AU |
|--|--------|---|--------------------------|-----------------------|
| Nominal battery voltage | | 24 V | 48 V | 48 V |
| Continuous, output power | @ 40°C | 3500 W | 4000 W | 6000 W |
| Continuous, charge current | | 145 A | 83 A | 125 A |
| Continuous, output power | @ 25°C | 4000 W | 4500 W | 7000 W |
| Continuous, charge current | | 146 A | 83 A | 125 A |
| 20 second load rating | @ 40°C | 10500 W | 12000 W | 18000 W |
| 20 second output current | | 40 A | 47 A | 70 A |
| 1 minute output power | @ 40°C | 7600 W | 8700 W | 13000 W |
| 60 minute output power | @ 40°C | 4700 W | 5300 W | 8000 W |
| DC input voltage range | | 20 - 34 V | 40 - 68 V | 40 - 68 V |
| TRANSFER SWITCH | | | | |
| AC transfer current capacity | | 63 A | | |
| Max AC input source, (generator) W | | 15 kW | | |
| Max total output to Load, AC source + inverter | | 15 kW | | |
| AC transfer time | | no-break | | |
| If grid fails | | two AC cycles | | |
| Battery charger type | | 5 stage, power factor corrected with dual stage float | | |
| DC consumption idle | | 6 W | | |
| Standby (adjustable rate) | | 12 - 20 W | | |
| ON with no load | | 36 W | 37 W | 40 W |
| Peak efficiency – all modes | | 95% | 95.5% | 96% |
| 10% load | | 90.5% | 91% | 91% |
| 20% load | | 93% | 94% | 94% |
| 50% load | | 94.5% | 95% | 95.5% |
| 100% load | | 91% | 92.5% | 93% |
| Max Grid Feed capacity | | rated output | | |
| AC OUTPUT standalone | | | | |
| Setting accuracy | | 210 to 240 V+/- 1% | | |
| Regulation | | <2% droop @ 0-200% rated load (<5% 0-300%) | | |
| THD | | <3% @ 0-200% rated load | | |
| Frequency | | 50 or 60 Hz +/-0.005% standalone | | |
| AC SOURCE (input) | | | | |
| Nominal voltage | | 210 to 240 V~ | | |
| Tolerance on nominal voltage | | programmable - 1% to 15%, + 1% to 10% | | |
| Nominal input frequency | | 50/60Hz | | |
| Tolerance on nominal frequency | | programmable +/- 1% to 10% | | |
| Generator can be started by | | battery SoC, DC voltage, battery load, unit temperature, time & remote control | | |
| Battery temperature sensor | | Yes | | |
| Mid point battery voltage sensing | | Yes | | |
| Inverter display | | 22 x LEDs with auto adjusting intensity. Display indicates, charger status, remaining useable battery capacity, alarms, AC status. AC status LEDs powered from AC voltage. Generator control button. Output mode button. Alarm silence button. | | |
| Digital Inputs | | 4 off | | |
| Shunt Inputs | | 2 user definable: +/-75mV | | |
| Analogue Inputs | | 2 general purpose logged 0-60V | | |
| Relay Outputs | | 4 off: 60 V, 500 mA | | |
| Digital outputs | | 3 off: 60 V, 5 mA | | |
| Communication ports | | 2 off RS232 with adjustable baud rate of up to 57600 | | |
| Memory retention of settings & data | | permanent | | |
| SP LINK configuration and monitoring software | | Standard, allows configuration of parameters or customer can view LED & digital display remotely. | | |
| Dimensions (mounted) | | 345 W x 545 H x 215 D | | |
| Weight | | 34 kg | 35 kg | 40 kg |
| Circuit Breakers | | double pole 63A for both AC Source and AC Load | | |
| Standards | | EN61000-6-3 2007, AS3100 2002, AS4777 2005 (grid connect) | | |
| Protection | | IP43 | | |
| Warranty | | 7 years when installed by a Selectronic SP PRO accredited installer (conditions apply) | | |
| Availability | | AUS: Feb 09 NZ: April 09 | AUS: Feb 09 NZ: April 09 | AUS: Now NZ: March 09 |
| Grid Approval | | May 2009 | May 2009 | May 2009 |
| Introductory Price (retail incl GST) | | \$6,690 | \$7,790 | \$8,990 |

Through a policy of continual improvement specifications may differ from this brochure.
All ratings are at @ 25°C and nominal battery voltage unless otherwise stated and correct as at Feb 09.

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