

SP PRO Series 2i

The SP Pro series of bi-directional inverter chargers is one the most flexible and intelligent available in the market today. With our modular approach, systems with up to 240kW of continuous battery inverter capacity can be realised. Using sophisticated communications up to 480kW of managed AC coupled solar can be installed.

Battery Voltages of 24V, 48V and 120V are accommodated. Additionally, by incorporating unlimited DC Coupled solar, wind, backup generator or a grid supply*, our ethos of never being without power is always met.



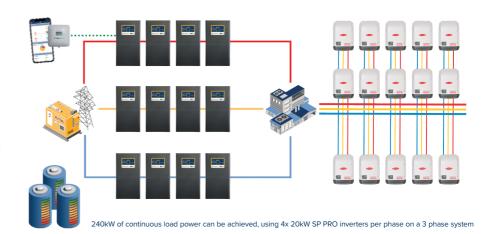
The same SP PRO is suitable for both Off-Grid and Solar Hybrid (On-Grid) installations for residential, commercial and industrial applications. Our inverters provide true transition from an On-Grid to an Off-Grid system (and vice versa) with a simple on-site setting change.

Selectronic inverters have been made in Australia since 1981 and since then have powered 1000's of sites from the tropics of Indonesia, the mountains of the Himalayas, the deserts of UAE, the outback of Australia and on suburban homes throughout the world. In fact, nobody has more experience in this market sector than Selectronic.

At Selectronic, we strive for the lowest total cost of ownership. New firmware releases are generally backward compatible ensuring systems are not placed in a redundant technology corner. Engineers and Installers are supported by people who talk your language, understanding power systems with a breadth of knowledge and experience that you require.

Selectronic has you covered with world renowned inverters that offer grid independence, proven reliability, now with MODBUS RTU ultimate flexibility, retrofit capability and class leading warranties.





- · Australian owned, designed, manufactured and supported
- · More features included as standard 'inside the box' than any other inverter charger
- AC continuous load and charging power from 3kW to 240kW with up to 480kW of managed AC coupled solar
- Up to 4 SP PRO inverters per phase Single Phase, 2 Phase, Split Phase or 3 Phase
- Off-Grid and On-Grid* (grid backup and grid feed), marine and mobile operation
- All output ratings are Continuous 24/7
- Lithium, Lead Acid, Lead carbon battery compatible
- MODBUS RTU
- Easily configurable for domestic and commercial applications
- Inbuilt configuration wizard for super-fast setup
- AC Coupling recovery mode to easily recharge from AC coupled solar
- · AC or DC Coupling compatible
- · Retrofit existing systems
- Integrated generator controller to maximise system efficiency
- 63A or 125A internal transfer contactor standard, or up to 1000A per phase External
- Up to 10-year warranty**

*On Grid connection only applies to SPMC480-AU, SPMC481-AU, SPMC482-AU, SPLC1200 and SPLC1200 **Conditions apply see website for detail

Manufacturing in Australia Since 1964











| SP PRO MODEL No. | SPMC240-AU | SPMC241-AU | SPMC480-AU | SPMC481-AU | SPMC482-AU | SPMC1201 | SPLC1200 | SPLC1202 | | | |
|--|---|---------------------|----------------------|-------------------------------------|-------------------|--------------------|---|-------------------|--|--|--|
| AC OUTPUTS | | | | | | | | | | | |
| Maximum AC Load Power from batteries: 30 secs | 7.5kW | 10.5kW | 8.4kW | 12.0kW | 18.0kW | 18.0kW | 33.0kW | 38.0kW | | | |
| 1 minute | 5.4kW | 7.6kW | 6.0kW | 8.7kW | 13.0kW | 13.0kW | 26.0kW | 35.0kW | | | |
| 30 minutes | 4.2kW | 6.75kW | 5.25kW | 7.0kW | 11.25kW | 11.25kW | 23.0kW | 30.0kW | | | |
| 60 minutes | 3.2kW | 4.7kW | 3.7kW | 5.3kW | 8.0kW | 8.0kW | 18.0kW | 24.0kW | | | |
| Continuous 24/7 | 3.0kW | 4.5kW | 3.5kW | 5.0kW | 7.5kW | 7.5kW | 15.0kW | 20.0kW | | | |
| Max total output to load | 3.UKW | | | | | 7.5KW | | | | | |
| max total output to load | | IDKWI + SI | P PRO continuous | rating + Solar inver | ter output | | 30kW1 + SP PRC | 7 + Solar inverte | | | |
| Nominal AC voltage - Total harmonic distortion when SP PRO is grid forming | 240V AC configurable 210 to 240V AC / <3% @ 0-200% rated load | | | | | | | | | | |
| Frequency when SP PRO is grid forming | 50 or 60Hz +/-0.005% No Grid | | | | | | | | | | |
| Max Export to grid using Selectronic Certified Solar Inverters/Generic Solar Inverters³ per phase | Not Applicable | Not Applicable | 7.0kW / 3.5kW | 10.0kW / 5.0kW | 15.0kW / 7.5kW | Not Applicable | 30kW / 15kW | 40kW2 / 20k | | | |
| Max rating of managed AC coupled solar (SCERT) per phase | 6.0kW | 9.0kW | 7.0kW | 10.0kW | 15.0kW | 15.0kW | 30.0kW | 40.0kW | | | |
| AC INPUTS | | | I . | | | | | | | | |
| Nominal input voltage from Grid or Generator | | | | 210 +/- 15% to 2 | 40 +/- 10% V AC | | | | | | |
| Nominal input frequency from Grid or Generator | | | | 50Hz | | | | | | | |
| Max Input from Grid or Generator Current / Power | | | 62.01/ | | 17- 1076 | | 125.41 | / 2014/11 | | | |
| · · · · · · · · · · · · · · · · · · · | 63A1 / 15kW1 less than 0.03 seconds | | | | | | 125A¹ / 30kW¹ | | | | |
| Switching time between grid/generator & batteries | | | | | | | | l | | | |
| Max continuous Battery Charging | 3.0kW / 125A | 4.5kW / 187A | 3.5kW / 73A | 5.0kW / 104A | 7.5kW / 156A | 7.5kW / 62A | 15.0kW / 125A | 20.0kW / 166 | | | |
| DC INPUTS | | | | | | ı | | | | | |
| Nominal DC input / DC voltage start-up range (V DC) | 24V / 20 - 34 48V / 40 - 68 120V / 100 - 162 | | | | | | | | | | |
| Battery capacity (range) | up to 60,000Ah/7.2MWh | | | | | | | | | | |
| EFFICIENCY | | | | | | | | | | | |
| Peak Efficiency | 95% | 95% | 95% | 96% | 96% | 97% | 97.2% | 97.2% | | | |
| DC consumption: idle | | | | 6 | W | | | | | | |
| GENERAL | | | | | | | | | | | |
| Ambient Temperature Operating Range | | | | -10°C t | o 60°C | | | | | | |
| Inverter display indicators | Charger status, charge source, usable battery capacity remaining, alarms, AC status. | | | | | | | | | | |
| Renewable charging source | Managed AC coupling with any Selectronic Certified solar inverter, any DC charge controller with shunt, generic AC coupled Solar inverter | | | | | | | | | | |
| Maximum No. of SP PRO's per phase | | | | | 1 | | | | | | |
| Data logging storage | Up to 2.5 years | | | | | | | | | | |
| SP LINK configuration and monitoring software | Included as standard | | | | | | | | | | |
| Internet Monitoring Portal | Select.live (optional) | | | | | | | | | | |
| FEATURES | | | | | (- | | | | | | |
| Generator Backup connectivity and control | Inbuilt for | Off Grid Optional | for On Grid using | our Crid Fail Back | ın madula | Inhu | uilt for Off Grid syst | tome | | | |
| <u> </u> | Inbuilt for Off-Grid. Optional for On-Grid using our Grid Fail Backup module Inbuilt for Off-Grid systems | | | | | | | | | | |
| Battery temp sense / Smart Capacitor charging | Yes / Yes Configurable battery charging set points for most battery chemistries including lithium, www.selectronic.com.au for details. | | | | | | | | | | |
| Battery Compatibility | Config | gurable battery cha | arging set points to | | | lithium. www.selec | ctronic.com.au for o | details. | | | |
| Digital Control Inputs | 4 of, 12V to 60V True, < 3V False | | | | | | | | | | |
| Analogue Shunt Inputs | Two user definable: Suitable for 25A - 1000A current shunts at 25mV - 100mV | | | | | | | | | | |
| Analogue Inputs | 2 general purpose logged 0-60V - | | | | | | | | | | |
| Control Outputs | Relay: 4 of 60V DC, 500mA / Digital: 3 of 60V DC, 5mA inconsistent | | | | | | | | | | |
| Communication Ports | USB Type B and RS232 (concurrent operation), CAN bus, RS485, DRM | | | | | | | | | | |
| Supported Protocols | MODBUS RTU (via RS485) | | | | | | | | | | |
| Dual, Split & Three Phase compatible | Yes with multiple SP PRO's | | | | | | | | | | |
| Warranty | 5 years international standard warranty, 5-10 years warranty for Australia and New Zealand (conditions apply, see website for details) | | | | | | | | | | |
| STANDARDS | | | | | | | | · | | | |
| SIANDARDS | | | IF | C 62040-1-1:2002 | / AS 62040-1-1:20 | 03 | | | | | |
| | | | | | | | | | | | |
| Safety - Uninterruptible Power Supply (UPS) | | | | IEC 62109-1 and IEC 62109-2 | | | | | | | |
| Safety - Uninterruptible Power Supply (UPS) Safety - Power converters used in PV Systems | | | EN 61000 6 3-300. | 7 | | | _ | | | | |
| Safety - Uninterruptible Power Supply (UPS) Safety - Power converters used in PV Systems EMC (Domestic limits) | | ı | EN 61000.6.3:200 | 7 | | | - EN 61000 6 4:000 | 7 | | | |
| Safety - Uninterruptible Power Supply (UPS) Safety - Power converters used in PV Systems EMC (Domestic limits) EMC (Industrial limits) | A00175 | | - | | 0400 411 071 711 | | EN 61000.6.4:200 | | | | |
| Safety - Uninterruptible Power Supply (UPS) Safety - Power converters used in PV Systems EMC (Domestic limits) EMC (Industrial limits) Grid Connect | AS/NZS 4777. | | - | SPMC481-AU, SPM | | | - EN 61000.6.4:200' only), IEC 62116:20 | | | | |
| Safety - Uninterruptible Power Supply (UPS) Safety - Power converters used in PV Systems EMC (Domestic limits) EMC (Industrial limits) Grid Connect Certification | AS/NZS 4777. | | - | SPMC481-AU, SPM Certificate of S | uitability, RCM | | | | | | |
| Safety - Uninterruptible Power Supply (UPS) Safety - Power converters used in PV Systems EMC (Domestic limits) EMC (Industrial limits) Grid Connect Certification Protection | AS/NZS 4777. | | - | SPMC481-AU, SPM Certificate of S | | | | | | | |
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 $^{^{\}rm I}$ Up to 240kW/1000A per phase with Installer built external contactor $^{\rm 2}$ Above 30kW requires an Installer built external AC contactor $^{\rm 3}$ Suitable for On Grid systems only