

SPWM Series Inverter 1-10kVA

Nowadays our power systems comprise of complex networks, where power stations and load centres are interconnected through long power transmission and distribution networks. Although the power generation is reliable the quality can be affected.

A phased shifted pulse width modulation inverter is an effective solution for increasing power and reducing harmonics of AC waveforms. The PSPWM is where each cell is modulated independently, providing an even power distribution among the cells and as a result generates an output waveform with lower distortion and lower acoustic noise.

Using the latest technology, the new Thytec range of SPWM inverters are smaller, lighter, and more compact in size. The





Key features and benefits

- Designed and manufactured in Australia, by a company with 35 years experience in DC power systems
- Reliable and flexible design
- Complies with Australia standards
- Intelligent remote alarms
- Optional to be fitted into a freestanding server cabinet

Technical Specification

| Model Number | | SPWM-1 1kVA | SPWM-2 2kVA | SPWM-3 3kVA | SPWM-5 5kVA | SPWM-10 10kVA | |
|--|--------------------------------------|----------------------------|---|----------------|----------------|------------------|--|
| Battery Input | Voltage (DC) | 48/120/240 | 48/120/240 | 48/120/240 | 120/240 | 120/240 | |
| AC Output | Power (W) | 800 | 1600 | 2400 | 4000 | 8000 | |
| | Voltage | 230 | 230 | 230 | 110/230 | 110/230 | |
| | Frequency (Hz) | 50/60/400 | 50/60/400 | 50/60/400 | 50/60/400 | 50/60/400 | |
| | Current (A) | 4.2 | 8.6 | 13 | 45/27.7 | 90/43.5 | |
| | Crest Factor | 5:1 | | | | | |
| | Parallel operation | Optional | | | | | |
| | Overload | 125% for 10 | 125% for 10 minutes | | | | |
| | Overload | 150% for 1 m | 150% for 1 minute | | | | |
| | Regulation | +2% | +2% | +2% | +2% | +2% | |
| | Harmonic distortion | 2% | 2% | 2% | 2% | 2% | |
| | Efficiency | 91% | 92% | 92% | 93% | 95% | |
| Battery Input Protection | Battery DC circuit | breaker | | | | | |
| | Low shutdown | | | | | | |
| | Under DC voltage | • | | | | | |
| Environment | Working temperature | 0-40C @ full 0-50C @ 50 | 0-40C @ full load 0-50C @ 50% load | | | | |
| | Storage temperature | 0-70C | 0-70C | | | | |
| | Working humidity | 20-90% non- | 20-90% non-condensing | | | | |
| EMC | Conduction & Radiation | Compliance | Compliance to EN55022 Class A | | | | |
| Input DC Connections | Anderson connectors | 1 Red & 1 Bl | 1 Red & 1 Black | | | | |
| Output AC Connections | 3 Pin socket for units up to 2kVA | 240V 10A RS | 240V 10A RS-10 / hardwired terminal blocks | | | | |
| Output Control | 240V neon indicator | Inverter 'ON' | Inverter 'ON' red | | | | |
| | LCD display | Voltage and | Voltage and frequency | | | | |
| Remote Alarms Voltage Free Contacts | NC-COM-NO | Terminals for | Terminals for Inverter fault/failure | | | | |
| Interface | Ethernet | Optional | | | | | |
| Physical | Size 19" rack | 482W x 133 | 482W x 133H x 350D (mm) 3RU x 450D (mm) 4RU | | | | |
| | Weight | 7 | 8 | 8.5 | 9.8 | 14 | |

