



LOCAL AREA NETWORKS (LAN)



SERVERS



DATA CENTRES



CASH REGISTERS



TELECOMMUNICATIONS DEVICES



INDUSTRIAL PLCS



ELECTRO-MEDICAL DEVICES



EMERGENCY DEVICES (Lights/Alarms)

# Sentinel Power

## 5-6 kVA

single/single-phase

## 6.5-10 kVA

single/single-phase and three/single-phase



## Highlights

- High UPS reliability
- Operational mode selection
- High quality output voltage
- Simplified installation
- High battery reliability
- Power Share
- Low impact on mains supply



SENTINEL POWER is the ideal solution for powering critical network systems and processes. The series includes 5-6kVA single/single-phase and 6.5-8-10kVA single/single-phase and three/three-phase models with On-line double conversion technology (VFI); the load is always powered by the inverter which provides a sinusoidal voltage, filtered and stabilised in terms of voltage, form and frequency. EMI filters (input and output) significantly provide further immunity from mains disturbances and lightning strikes.

SENTINEL POWER stands for technology, performance (selectable Economy Mode and Smart Active Mode) and diagnostics (LCD custom display, RS232 and USB interfaces with Powershield<sup>®</sup> software included, ESD input, and a communications slot for optional interface cards).

### High UPS reliability

- Total microprocessor control
- Static and manual maintenance bypass

- Features guaranteed up to 40°C (the components are designed to work at high temperatures and thus are subject to less stress at normal temperatures)

#### Operation selection

The operating mode may be programmed using software supplied or manually via the mimic panel.

- On-line double conversion Mode: for critical applications.
- ECO Mode: to increase output (up to 98%), allows for selection of Line Interactive technology (VI) to power low priority loads from the mains supply.
- Smart Active Mode: the UPS automatically decides upon the operating mode (VI or VFI) based on the quality of the network.
- Back-up Mode: the UPS can be selected to function only when mains power fails (emergency mode only)
- Frequency converter (50 or 60 Hz).

#### High quality output voltage

- Even with non-linear loads (loads with a crest factor of up to 3:1)
- High short circuit current on Bypass
- High overload capacity 150% by inverter (even with mains failure).
- Filtered, stabilised and reliable voltage (double conversion On-line technology (VFI compliant with IEC 62040-3) with filters for the suppression of atmospheric disturbances.
- Power factor correction: UPS input power factor close to 1 and sinewave current absorption

#### Simplified Installation

- UPS can be installed on a single-phase or three-phase distribution network
- Output terminal board + 2 IEC sockets for powering local utilities (computers, modems, etc.)
- Simplified positioning (built-in castors).

#### High battery reliability

- Automatic and manual battery test
- Reduced ripple component (detrimental to the batteries) using an Low Ripple Current Discharge (LCRD) system
- Unlimited extendible runtime using matching Battery Boxes
- The batteries are not used during mains failures of <40 ms (high hold up time) or when the input supply is between 84V to 276V.

#### Power Share

Two 10A configurable IEC output sockets for runtime optimisation. Power Share allows low priority loads to be switched-off on mains failure; alternatively, emergency loads, normally not powered when mains is present, can be activated.

#### Low impact on mains network

- Input current sinusoidal absorption on single-phase/single-phase series.

#### Other features

- Advanced diagnostics: status, measurements, alarms available on custom LDC display
- Low noise (<40dBA) for installation in any environment thanks to load dependent, PWM digitally-controlled ventilation and the use of a high frequency switching inverter (>20kHz, value greater than the audible range)
- Auto restart (automatic when mains supply is restored, programmable via software or mimic panel)
- Emergency back-up function, the UPS can be selected to function only when mains fails (emergency lighting only)
- Back feed protection: to prevent energy being fed back into the mains supply
- Flash upgradable firmware



#### Advanced communication

- Compatible with Riello UPS TeleNetGuard service monitoring
- Advanced multi-platform communication for all operating systems and network environments: PowerShield<sup>3</sup> supervision and shutdown software for Windows operating systems 7, 2003, Vista, 2003, XP, Linux, Mac OS X, Sun Solaris, Linux, Novell and other Unix operating systems.
- RS232 serial port
- Plug and Play function
- Slot for installation of communications boards.

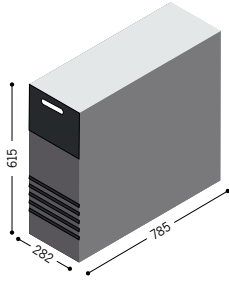


Battery box

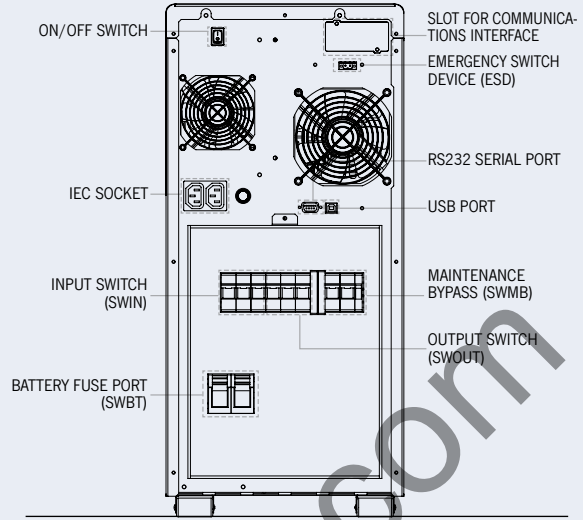
MODELS

BB SPW 240-A3 / BB SPW 240-A6  
BC SPW 240-M1/ BC SPW 240-M4

Dimensions  
(mm)



**SPW 5000 - SPW 6000**  
**SPW 6500 - SPT 8000**  
**SPW 10000**



www.upsdirect.com

| MODELS                                       | SPW 5000  | SPW 6000     | SPT 6500   | SPT 8000     | SPT 10000     |
|--|---|--------------|--|--------------|---------------|
| <b>POWER</b>                                 | 5000VA/4000W  | 6000VA/4800W | 6500VA/5200W   | 8000VA/6400W | 10000VA/8000W |
| <b>INPUT</b>                                 |   |              |  |              |               |
| Nominal voltage                              | 220-230-240 Vac Single-phase  |              | 220-230-240 Vac single-phase or 380-400-415 Vac three-phase with neutral |              |               |
| Minimum voltage without battery intervention | 170 Vac @ load 100% / 140 Vac @ load 50%  |              |  |              |               |
| Nominal frequency                            | 50 or 60 Hz $\pm$ 5Hz   |              |  |              |               |
| <b>BY PASS</b>                               |   |              |  |              |               |
| Voltage tolerance                            | 180 - 264 Vac (selectable in Economy Mode and Smart Active Mode)                                      |              |  |              |               |
| Frequency tolerance                          | Selected frequency $\pm$ 5%   |              |  |              |               |
| <b>OUTPUT</b>                                |   |              |  |              |               |
| Nominal voltage                              | 220 - 230 - 240 Vac selectable  |              |  |              |               |
| Voltage distortion                           | < 3% with linear load / < 6% with non-linear load   |              |  |              |               |
| Frequency                                    | 50 or 60 Hz selectable or with automatic selection  |              |  |              |               |
| Static variation                             | $\pm$ 1.5 %   |              |  |              |               |
| Dynamic variation                            | $\leq$ 5% in 20 ms  |              |  |              |               |
| Waveform                                     | Sinusoidal  |              |  |              |               |
| Crest factor                                 | $\geq$ 3 : 1  |              |  |              |               |
| <b>BATTERIES</b>                             |   |              |  |              |               |
| Charging time                                | 6-8 hours   |              |  |              |               |
| <b>OVERLOAD TIMES</b>                        |   |              |  |              |               |
| 100% < Load < 125%                           | 1 minute  |              |  |              |               |
| 125% < Load < 150%                           | 4 seconds   |              |  |              |               |
| Load > 150%                                  | 0.5 seconds   |              |  |              |               |
| <b>OTHER FEATURES</b>                        |   |              |  |              |               |
| Net weight (kg)                              | 91  |              | 92   | 105          | 106           |
| Gross weight (kg)                            | 99  |              | 100  | 110          | 111           |
| Dimensions (hwd) (mm)                        | 615 x 282 x 785   |              |  |              |               |
| Packaging dimensions (hwd) (mm)              | 863 x 388 x (650+15)  |              |  |              |               |
| Smart Active Output                          | up to 98%   |              |  |              |               |
| Protection devices                           | Overcurrent - short-circuit - overvoltage - undervoltage - thermal - low battery discharge protection |              |  |              |               |
| Communication                                | USB / RS232 + slot for communications interface   |              |  |              |               |
| Input sockets                                | Terminal board  |              |  |              |               |
| Output socket                                | Terminal board + 2 IEC 320 C13  |              |  |              |               |
| Regulations                                  | EN 62040-1 EMC EN 62040-2 directive 2006/95/EC - 2004/108 EC EN 62040-3                               |              |  |              |               |
| Ambient temperature                          | 0°C / +40°C   |              |  |              |               |
| Relative humidity                            | < 95% non-condensing  |              |  |              |               |
| Colour                                       | Dark grey RAL 7016  |              |  |              |               |
| Noise level                                  | < 45 dBA a 1 m  |              |  |              |               |
| <b>OPTIONS</b>                               |   |              |  |              |               |
| Battery cabinets for extended runtimes       | yes (with and without battery charger)  |              |  |              |               |
| Isolation transformer (hlp) mm/kg            | 500 x 400 x 265 / 80  |              |  | -            |               |