

# Centurion RT

6000VA | 10kVA

True Online Double Conversion UPS



**The Centurion RT** features true online double conversion. As our highest single phase power density UPS, this sophisticated range will provide the most comprehensive protection for mission critical devices such as sensitive networks, computers, servers, telecom applications, as well as industrial applications. Meticulously developed by PowerShield engineers to be a world leading technology UPS, the Centurion RT addresses absolutely all requirements and features as has been demanded by the sophisticated Australian power consumer and hence stands in a class of its own, as a world leading UPS technology.

## Features



### Exceptional surge protection

- Offering the best surge protection in its class to protect against damaging surges

### Unity Output power factor (PF=1)

- The Centurion RT is a high-density UPS with unity output power factor (PF=1) to provide higher performance and efficiency to critical applications

### Informative & easy-shift LCD display

- The front panel LCD display panel is readily viewable whether the UPS is horizontal or vertical. It displays all critical and noncritical parameters, including remaining battery backup time

### Rack/Tower design

- The Centurion RT can be easily installed as a floor-standing tower or in a 19-inch rack
- High power density means that both the UPS and the battery bank are only 2RU height each

### Emergency Power Off Function (EPO)

- This feature can turn off and isolate the UPS in the event of fires or other emergencies

### ECO & advanced ECO mode

- It has an advanced ECO mode, which allows the UPS to operate at a very high efficiency, up to 98%. When the utility mains input voltage is within the ECO range the UPS saves energy by passing the mains supply directly through to the load, while the inverter continues to operate in a passive mode

### Hot swappable batteries

- Battery banks are hot-swappable. This keeps the UPS operational during battery replacement. Additional battery banks can be added to increase battery backup time

### HID Communication via USB

- HID can be used for simple management with Windows, Apple, Linux and NAS devices and a large variety of industrial controllers that support HID
- HID ensures a safe and orderly shutdown in the event of a prolonged power outage

### NetGuard software communication via USB

- The free, downloadable NetGuard software provides complete power monitoring. Parameters such as input/output voltage, battery capacity and load level are easily viewed. It also ensures a safe and orderly shutdown in the event of a prolonged outage

### Standard extra large charger

- The Centurion RT has been designed with a larger charger than other UPSs ensuring rapid recharge times when adding additional battery banks
- Larger charger allows for easy addition of extra battery banks

### Optional Accessories

- PSSNMPV4 - SNMP card (option to connect a PSEMD)
- PSEMD - Environmental Monitoring Device for temperature & humidity
- PSModbus - Modbus card
- PSAS400 - AS400 dry contact card
- PSRK - 1RU rail kit
- PSRTBB16, PSRTBB20 - Extra battery modules
- PSMBSR10K - Maintenance Bypass Switches
- PSPDU10K - 10KVA PDU with 10A IEC 320 C13 (x8), 16A IEC 320 C19 (x4)



DESIGNED BY AUSTRALIANS FOR AUSTRALIAN CONDITIONS



| CENTURION RT RANGE (6K - 10K) SELECTION GUIDE |   |  |                                    |                                |                            |
|---|---|--|------------------------------------|--------------------------------|----------------------------|
| MODEL   | CENTURION RT 6000L  |  | CENTURION RT 10KL                  | STANDARD RT BATTERY BANK       | OPTIONAL RACK BATTERY BANK |
| Model Number                                  | PSCERT6000L   |  | PSCERT10KL                         | PSRTBB16                       | PSCERBB20                  |
| Capacity                                      | 6000VA/6000W  |  | 10kVA/10kW                         | Suits PSCERT6000L & PSCERT10KL |                            |
| Topology                                      | True online double-conversion, Pure Sine Wave   |  |                                    |                                |                            |
| <b>INPUT</b>                                  |   |  |                                    |                                |                            |
| Voltage Range                                 | Line Loss   | 110~300Vac @ (0~60%) Load; 140~300V @ (60~80%) Load; 176~300Vac @ (80~100%) Load |                                    |                                |                            |
|   | Low Line Comeback   | Low Line Loss Voltage + 10V  |                                    |                                |                            |
|   | High Line Comeback  | High Line Loss Voltage - 10V   |                                    |                                |                            |
| Frequency Range                               | 46Hz ~ 54 Hz @ 50Hz system; 56Hz ~ 64 Hz @ 60Hz system  |  |                                    |                                |                            |
| Phase   | Single phase with ground  |  |                                    |                                |                            |
| Input Power Factor Correction                 | ≥ 0.99 @ nominal voltage (100% load)  |  |                                    |                                |                            |
| <b>OUTPUT</b>                                 |   |  |                                    |                                |                            |
| Output Voltage                                | 240Vac (Selectable 208 / 220 / 230 / 240VAC)  |  |                                    |                                |                            |
| AC Voltage Regulation                         | ± 1%  |  |                                    |                                |                            |
| Frequency Range (Synchronized Range)          | 46Hz ~ 54 Hz @ 50Hz system<br>56Hz ~ 64 Hz @ 60Hz system  |  |                                    |                                |                            |
| Frequency Range (Batt. Mode)                  | 50 Hz ± 0.1 Hz or 60Hz ± 0.1 Hz   |  |                                    |                                |                            |
| Overload                                      | AC Mode   | 100%~110%: 10min ; 110%~130%: 1min ; >130% : 1sec                                |                                    |                                |                            |
|   | Battery Mode  | 100%~110%: 30sec ; 110%~130%: 10sec ; >130% : 1sec                               |                                    |                                |                            |
| Current Crest Ration                          | 3:1 Max   |  |                                    |                                |                            |
| Harmonic Distortion                           | ≥ 1 % @ 100% Linear Load; ≥ 4% @ 100% Non-linear Load   |  |                                    |                                |                            |
| Transfer Time                                 | Line to Battery   | 0 ms   |                                    |                                |                            |
|   | Inverter to Bypass  | 0 ms   |                                    |                                |                            |
|   | Inverter to Eco   | < 10 ms  |                                    |                                |                            |
| <b>EFFICIENCY</b>                             |   |  |                                    |                                |                            |
| AC Mode                                       | > 94%   |  |                                    |                                |                            |
| Battery Mode                                  | > 93%   |  |                                    |                                |                            |
| <b>BATTERY</b>                                |   |  |                                    |                                |                            |
| Battery Banks                                 | PSRTBB16 (standard), PSCERBB20 (optional). Customised options available                         |  |                                    |                                |                            |
| Battery Number                                | Batteries are 12Vdc. Customised optional strings of 16, 17, 18, 19, 20                          |  |                                    | x 16                           | x 20                       |
| Typical Recharge Time                         | 4 hours for PSRTBB16 and PSCERBB20  |  |                                    |                                |                            |
| Charging Current (max.)                       | 4 A ± 10%   |  |                                    |                                |                            |
| <b>COMMUNICATIONS AND MANAGMENT</b>           |   |  |                                    |                                |                            |
| Interface                                     | USB and RS232 as standard   |  |                                    |                                |                            |
| Software                                      | PowerShield® NetGuard® software - supports Windows, Linux, Unix and Mac based operating systems |  |                                    |                                |                            |
| HID   | Supports Windows, Apple, Linux, NAS and various industrial controllers                          |  |                                    |                                |                            |
| Optional                                      | Intelligent slot for PSSNMPV4, PSMdbus or PSAS400 dry contact                                   |  |                                    |                                |                            |
| <b>PHYSICAL</b>                               |   |  |                                    |                                |                            |
| Dimension, (D x W x H) mm                     | UPS Unit: 655 x 438 x 88 [2U] 17kg  |  | UPS Unit: 655 x 438 x 88 [2U] 20kg | 733 x 438 x 88 [2U]            | 580 x 438 x 133 [3U]       |
| Weight (kgs)                                  | 13.5  |  | 16                                 | 54                             | 57                         |
| <b>OPERATING ENVIRONMENT</b>                  |   |  |                                    |                                |                            |
| Temperature                                   | 0 ~ 40°C  |  |                                    |                                |                            |
| Humidity                                      | 95% (RH Non-condensing)   |  |                                    |                                |                            |
| Altitude                                      | <1000m  |  |                                    |                                |                            |
| Noise Level                                   | Less than 55dB @ 1 Meter  |  | Less than 58dB @ 1 Meter           |                                |                            |

- Product specifications are subject to change without notice
- Derate capacity to 60% in CVCF mode
- Derate capacity to 90% when the output voltage is adjusted to 208VAC
- If the UPS is installed or used in a place where the altitude is above 1000m, the output power must be derated one percent per 100m
- Power Factor = 1 when using 20 battery string; Power Factor = 0.9 when using 18 to 19 battery string; Power Factor = 0.8 when using 16 to 17 battery string



Rear PSCERT 6000L and 10KL



Rear Battery Pack PSRTBB16