

Centurion Tower

1000VA | 2000VA | 30000VA

6000VA | 10000VA

True Online Double Conversion UPS



The **Centurion** is a True Online Double Conversion UPS designed to provide comprehensive power protection for critical equipment. Versatile software management and hardware options offer the flexibility to build up a power protection solution to fit any application.

Meticulously developed by PowerShield engineers to be a world leading technology UPS, the Centurion Tower 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 protection in its class to protect against damaging surges.

Output Power Factor

- The Centurion Tower is a high-density UPS with output power factor (PF=0.9) to provide higher performance and efficiency to critical applications.

Informative LCD display

- The front panel LCD display panel is readily viewable and displays all critical and noncritical parameters, including the estimated battery backup time remaining.

Programmable outlets

- This UPS comes with programmable power management outlets allowing the user to control the load segments, thereby extending battery backup times to mission critical devices by shutting down non-critical items.

Emergency Power Off Function (EPO)

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

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.

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

Battery Bank Extension Options

- The Centurion Tower provides the option to increase battery backup time by simply adding additional battery banks.
- To address the need for fast charging of multiple battery banks, PowerShield engineers have incorporated additional independent internal chargers into the PSCEBB18CH and PSCEBB60CH.

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
- N+X parallel redundancy available for 6K/10K models
- Battery Banks - Backup time for all models is easily extended by simply plugging additional battery banks PSCEBB6, PSCEBB12, PSCEBB18CH, PSCEBB40, PSCEBB60CH
- External Maintenance Bypass Switches - PSMB52k, PSMB53k, PSMB5WP6k, PSMB5WP10k,



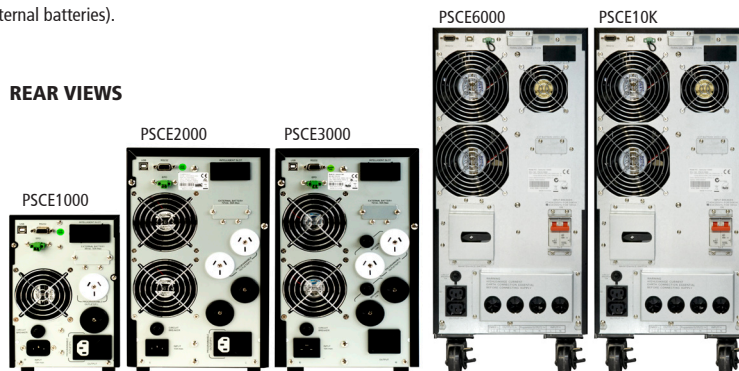
DESIGNED BY AUSTRALIANS FOR AUSTRALIAN CONDITIONS



CENTURION TOWER

| MODEL | Centurion Tower 1K | Centurion Tower 2K | Centurion Tower 3K | Centurion Tower 6K | Centurion Tower 10K | |
|--|--|---|--------------------|--|---------------------------------|--------------|
| Model Number | PSCE1000 | PSCE2000 | PSCE3000 | PSCE6000 | PSCE10K | |
| Capacity | 1000VA / 900W | 2000VA / 1800W | 3000VA / 2700W | 6000VA / 5400W | 10000VA / 9000 W | |
| Topology | True online double-conversion | | | | | |
| INPUT | | | | | | |
| Nominal Voltage | 200 / 208 / 220 / 230 / 240 Vac | | | 208 / 220 / 230 / 240 Vac | | |
| Voltage Range | 110-300 VAC ± 5% at 50% load 160-300 VAC ± 5% at 100% load | | | 110-300 VAC at 50% load 176-300 VAC at 100% load | | |
| Frequency Range | 40Hz~70Hz | | | 46Hz~54Hz or 56Hz~64Hz | | |
| Input Power Factor Correction | ≥ 0.99 @ 100% load | | | | | |
| OUTPUT | | | | | | |
| Output Voltage | 240Vac (200 / 208 / 220 / 230 / 240 Vac - Selectable) | | | 240Vac (208 / 220 / 230 / 240 Vac - Selectable) | | |
| Frequency Range (Synchronized Range) | 47~53Hz or 57~63Hz (Auto detect) | | | 46~54Hz or 56~64Hz (Auto detect) | | |
| Frequency Range (Batt. Mode) | 50Hz ± 0.1Hz or 60Hz ± 0.1Hz | | | | | |
| Voltage Regulation | ± 1% | | | | | |
| Current Crest Ratio | 3:1 | | | | | |
| Harmonic Distortion | ≥ 2% THD (linear load) : ≥ 4% THD (non-linear load) | | | ≥ 3% THD (linear Load) ≥ 6% THD (non-linear Load) | | |
| Transfer Time | AC Mode to Batt. Mode | | | | | |
| | Inverter to Bypass | | | | | |
| | | | Zero | | | |
| | | | 4 ms (typical) | | zero | |
| Waveform (Batt. Mode) | Pure Sinewave | | | | | |
| IEC Outlets | 10A, C13 x 2 | 10A, C13 x 2 | 15A, C19 x 1 | 10A, C13 x 2 | | |
| Australian Sockets | 2 | 4 | 4 | Hard wired terminal input / output | | |
| EFFICIENCY | | | | | | |
| AC Mode | 90% | 91% | | 91% | 92% | |
| ECO Mode | 98% | | | 98% | | |
| Battery Mode | 89% | | 90% | 88% | 89% | |
| BATTERY | | | | | | |
| Standard | Battery Type | 12V*9AH(x3) | 12V*9AH(x6) | 12V*9AH(x6) | 12V*9AH(x20) | 12V*9AH(x20) |
| | Typical Recharge Time | 4 hours recover to 90% capacity | | | 7 hours recover to 90% capacity | |
| | Charging Current (max) | 1.5A | | | 1A | |
| | Charging Current (max) | 1A / 2A / 4A / 6A / 8A (selectable via LCD setting) | | | 4.0A | |
| | Charging Voltage (nominal) | 36 VDC | 72 VDC | | 240 VDC | |
| PROTECTION | | | | | | |
| Full Protection | 1248 Joules / 39000 Amps | | | 1080 Joules / 30000 Amps | | |
| COMMUNICATIONS & MANAGEMENT | | | | | | |
| Interface | USB and RS232 as standard. Intelligent slot for PSSNMPV4 or PSAS400 dry contact or PSMBUS | | | | | |
| Software | Power Shield Netguard® Software - supports Windows based operating Systems, Linux, Unix & Mac | | | | | |
| HID | Supports Windows, Apple, Linux, NAS and various industrial controllers | | | | | |
| LCD Display/ Alarm | UPS Status, Load Level, Battery Level, Input/Output Voltage, Battery Time Remaining and Fault Indicators | | | | | |
| Audible Alarm | Battery Mode, Low Battery, Overload, Fault | | | | | |
| PHYSICAL | | | | | | |
| Standard | Dimensions D x W x H (mm) | 396 x 145 x 240 | 425 x 190 x 335 | | 592 x 250 x 576 | |
| | Weight (kg) | 12.5 | 25.8 | 27 | 75 | 78 |
| Long-run | Dimensions D x W x H (mm) | 396 x 145 x 240 | 425 x 190 x 335 | | 592 x 250 x 576 | |
| | Weight (kg) | 5.8 | 12 | 13.8 | 23 | 25 |
| OPERATING ENVIRONMENT | | | | | | |
| Humidity x Temperature | 20 - 95% (RH non-condensing) @ 0 - 40°C | | | | | |
| Noise Level | Less than 50dBA @ 1metre | | | Less than 55dB @ 1metre | | |
| COMPLIANCE | | | | | | |
| Safety | EN62040 - 1 - 1 2003, IEC60950 - 1 - 1 | | | | | |
| EMS | EN62040 - 2 2006 | | | | | |
| RoHS | Directive 2001 / 65 / EU | | | | | |

- Specifications are subject to change without prior notice.
- Long run models are available with larger chargers (no internal batteries).



While unlimited numbers of batteries banks can be added, if large battery banks are installed and require fast charging it is recommended to add a battery bank that has an internal charger. Usually these should be added as the second, third or fourth battery bank depending on your requirements. The PSCEBB18CH and PSCEBB60CH battery banks have built-in chargers and more batteries than regular battery banks. PSCEBB18CH suits 2k & 3K. PSCEBB60CH suits 6k & 10K.

| CENTURION TOWER LOAD VA | | | | | |
|-------------------------|------|------------|-------------|-------------|-------------|
| VA | LOAD | PSCE1000 | PSCEBB6 | PSCEBB6 | PSCEBB6 |
| 1000VA | 100% | 13 minutes | 52 minutes | 97 minutes | 125 minutes |
| 500VA | 50% | 26 minutes | 104 minutes | 194 minutes | 250 minutes |



| VA | LOAD | PSCE2000 | PSCEBB12 | PSCEBB18CH | PSCEBB12 |
|--------|------|------------|-------------|-------------|-------------|
| 2000VA | 100% | 13 minutes | 52 minutes | 110 minutes | 150 minutes |
| 1000VA | 50% | 26 minutes | 104 minutes | 220 minutes | 300 minutes |



| VA | LOAD | PSCE3000 | PSCEBB12 | PSCEBB18CH | PSCEBB12 |
|--------|------|------------|------------|-------------|-------------|
| 3000VA | 100% | 5 minutes | 27 minutes | 62 minutes | 100 minutes |
| 1500VA | 50% | 10 minutes | 54 minutes | 124 minutes | 200 minutes |



| VA | LOAD | PSCE6000 | PSCEBB40 | PSCEBB60CH | PSCEBB40 |
|--------|------|------------|-------------|-------------|-------------|
| 6000VA | 100% | 10 minutes | 55 minutes | 116 minutes | 170 minutes |
| 3000VA | 50% | 28 minutes | 110 minutes | 232 minutes | 340 minutes |



| VA | LOAD | PSCE10K | PSCEBB40 | PSCEBB60CH | PSCEBB40 |
|--------|------|------------|------------|-------------|-------------|
| 10KVA | 100% | 5 minutes | 28 minutes | 75 minutes | 100 minutes |
| 5000VA | 50% | 10 minutes | 56 minutes | 150 minutes | 200 minutes |



| TOWER MODELS BATTERY BANKS | | | | | |
|--|--------------------|-------------------|-------------------|----------------------|----------------------|
| Model Number | PSCEBB6 | PSCEBB12 | PSCEBB18CH | PSCEBB40 | PSCEBB60CH |
| Suits UPS | PSCE1000 | PSCE2000 / 3000 | PSCE2000 / 3000 | PSCE6000 / 10k / 20k | PSCE6000 / 10k / 20k |
| BATTERY | | | | | |
| Type | 12V*9AH | | | | |
| Number | 6 | 12 | 18 | 40 | 60 |
| Charging Voltage (Nominal DC) | 36Vdc | 72Vdc | 72Vdc | 240Vdc | 240Vdc |
| Charger | From UPS | From UPS | 4Amps | From UPS | 4Amps |
| PHYSICAL | | | | | |
| Dimensions D x W x H (mm) | 396 x 145 x 240mm | 425 x 190 x 335mm | 534 x 190 x 335mm | 592 x 250 x 576mm | 592 x 250 x 826mm |
| Weight Net/Gross (kg) | 20 / 21 | 40 / 42 | 60 / 63 | 122 / 138 | 180 / 198 |
| PROTECTION | DC Circuit Breaker | | | Fuses | |
| VIRTUALLY UNLIMITED RUN TIMES CAN BE ACHIEVED BY ADDING BATTERY BANKS TO STANDARD MODELS | | | | | |

* UPS output capacity is calculated at PF = 0.7