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

PREMIUM PROTECTION DOUBLE CONVERSION

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 encorporated additional independent internal chargers into the PSCEBB18CH and PSCEBB60CH.

Optional Accessories

- PSSNMPV4 - SNMP card (option to connect a PSEMD)
- PSEMD - Environental 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 - PSMBS2k, PSMBS3k, PSMBSWPB6k, PSMBSWPB10k,

DESIGNED BY AUSTRALIANS FOR AUSTRALIAN CONDITIONS

PowerShield

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	Zero				
	Inverter to Bypass	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).

REAR VIEWS



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

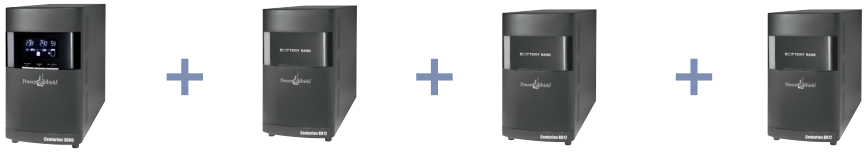
VA	LOAD	PSCE1000	PSCEBB6	PSCEBB6	PSCEBB6
1000VA	100%	13 minutes	52 minutes	97 minutes	125 minutes
500VA	50%	26 minutes	104 minutes	194 minutes	250 minutes



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 x145 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