



## CENTURION 3/1 RACK

In applications where only limited three phase power is available yet a large single phase power supply is necessary, the PowerShield® Centurion 3/1 Rack ticks all the boxes.



Recommended in applications where a balanced load is required, the Centurion 3/1 Rack Series has all of the feature of the Centurion range with the added ability of accepting three phase power to its input.

Like the Centurion range, the 3/1 Rack range boasts the same User friendly LCD display that allows the operator to interrogate and program the UPS on the front panel as well as with the included software. The Centurion 3/1 Rack UPS will accommodate any standard 19 inch rack.

It can also be configured to be a single phase in and single phase out UPS.

Models come standard, as long-run and external battery banks must be added.

### Features

- True double-conversion
- DSP technology guarantees high performance
- Output powerfactor 0.8
- Wide input voltage range (110-300Vac)
- Active power factor correction in all phases
- Built-in phase auto adapt function simplifies wire installation
- 50Hz/60Hz converter mode auto select
- Eco mode operation for energy saving (ECO)
- Emergency power off function (EPO)
- Generator compatible
- USB, RS-232 as standard
- Intelligent slot for PSSNMP or PSMdbus or PSAS400
- 3-stage extendable charging design for optimized battery performance
- Adjustable battery numbers
- Optional N+X parallel redundancy

### Applications include:

- critical servers
- networks PSMdbus or PSAS400
- critical IT applications
- PLCs
- security equipment
- manufacturing
- balancing loads



MODEL		PSCER10KL 3/1	PSCER20KL 3/1
Capacity		10000VA/8000W	20000VA/16000W
<b>INPUT</b>			
Phase		Phase Three phase in/one phase out	
Voltage Range	Low Line Transfer	176VAC (phase voltage) $\pm$ 3 @ 100% load 110VAC (phase voltage) $\pm$ 3 @ 50% load	
	Low Line Comeback	186VAC (phase voltage) $\pm$ 3 @ 100% load 120VAC (phase voltage) $\pm$ 3 @ 50% load	
	High Line Transfer	300VAC (phase voltage) $\pm$ 3 %	
	High Line Comeback	290VAC (phase voltage) $\pm$ 3 %	
Frequency Range		46~54 Hz or 56~64 Hz (Auto sensing)	
Input Power Factor		> 0.99 @ 100% load	
<b>OUTPUT</b>			
Voltage (ac mode)		< 6% @ 100% load 208 / 220 / 230 / 240Vac	
AC Voltage Regulation (Batt. Mode)		$\pm$ 1%	
Frequency Range (Synchronized Range)		46~54 Hz or 56~64 Hz	
Frequency Range (Batt. Mode)		50Hz $\pm$ 0.1Hz or 60Hz $\pm$ 0.1Hz	
Current Crest Ratio		3:1 (max.)	
Harmonic Distortion		< 2% THD (linear load) ; < 5% THD (non-linear load)	
Transfer Time	AC Mode to Batt. Mode	Zero	
	Inverter to Bypass	Zero	
Waveform (Batt. Mode)		Pure Sine Wave	
<b>EFFICIENCY</b>			
AC Mode		89%	
Battery Mode		86%	87%
<b>BATTERY</b>			
Standard Model	Battery Type	12V/9AH	
	Numbers	20 (18-20 adjustable)	20pcs x 2strings (18-20 adjustable)
	Typical Recharge Time	9 hours recover to 90% capacity	
	Charging Current (max.)	1A	2A
Long-run Model	Battery Type/Numbers	Depending on the capacity of external batteries	
	Charging Current (max.)	4A	8A
	Charging Voltage	273Vdc $\pm$ 1% (based on battery numbers at 20pcs)	
<b>PROTECTION</b>			
Full Protection		Overload, discharge, thermal, short circuit and overcharge protection	
<b>COMMUNICATIONS &amp; MANAGEMENT</b>			
Interface		USB or RS232 as standard, Intelligent slot for PSSNMP or PSAS400 dry contact or PSMdbus	
Software		PowerShield NetGuard <sup>®</sup> Software - supports Windows based operating Systems, Linux, Unix & Mac	
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	
<b>PHYSICAL</b>			
Standard Model	Dimensions (D x W x H)	UPS unit: (668 x 438 x 133 (3U)) mm Battery pack: (580 x 438 x 133 (3U)) mm	UPS unit: (668 x 438 x 266 (6U)) mm Battery pack: (580 x 438 x 133 (3U)) mm
	Weight (Net)	UPS unit: 22 kg Battery pack: 63 kg	UPS unit: 45 kg Battery pack: 63 kg
Long-run Model	Dimensions (D x W x H)	(668 x 438 x 133 (3U)) mm	
	Weight (Net)	22KG	
<b>ENVIRONMENT</b>			
Operation Humidity		0-95% RH @ 0-40° C (non-condensing)	
Noise Level		Less than 58dB @ 1 meter	Less than 60dB @ 1 meter
<b>COMPLIANCE</b>			
Safety		EN62040-1-1 2003, IEC60950-1-1	
EMS		EN62040-2 2006	
RoHS		Directive 2001 / 65 / EU	
		<b>LOAD</b>	<b>PSCER10KL 3/1</b>
PSCERBB20(x1)		50%	17 minutes
		100%	5 minutes
PSCERBB20(x2)		50%	35 minutes
		100%	17 minutes
PSCERBB20(x3)		50%	60 minutes
		100%	25 minutes
			<b>PSCE20KL 3/1</b>
PSCERBB20(x1)			5 minutes
			2.5 minutes
PSCERBB20(x2)			17 minutes
			7 minutes
PSCERBB20(x3)			25 minutes
			12.5 minutes

\* L means long-run model with larger chargers and therefore have no internal batteries \* Product specifications are subject to change without further notice