



## Uninterruptible Power Systems & Power Conversion Products

### SSG Series® 500VA On-line UPS

- Regenerative On-line UPS
- Double Conversion Design
- High Frequency Galvanic Isolation
- High Level Surge Protection
- Wide Input Voltage Window
- Extended Brownout Protection
- Generator Compatible
- Contact Closure Interface
- Compact Size, Lightweight



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#### Overview

The SSG500 is one of the smallest 500VA On-line UPS models available. Simply connect the SSG to any 115-120Vac, 45-65Hz single-phase power source and it will steadfastly regenerate a 120Vac, 60Hz output with an output regulation of  $\pm 3\%$ .

The SSG500 incorporates internal high frequency galvanic isolation, giving an extra level of protection against high voltage line transients, common mode noise and excessive neutral and ground currents.

Due to its unique double conversion design, the SSG500 first converts polluted incoming utility or generator power to DC, removing noise, transients and frequency drift. The DC power is then regulated and fed into a highly reliable, continuous duty PWM inverter. The inverter regenerates a new, regulated 120Vac output, featuring a pure AC sinewave with less than 4% harmonic distortion, at the desired frequency.

More than a UPS, the SSG500 is the ideal choice for solving the most difficult power problems. Having a wide input voltage range, the SSG500 virtually eliminates brownouts, sags and surges. Its technology has been field proven in the harshest environments, protecting sensitive equipment on off-shore drilling rigs, remote railroad and critical military applications, as well the most polluted industrial power environments.

The SSG500 may be connected to dirty generator sources to provide clean computer grade power, eliminating all voltage or frequency drift associated with generators.

The SSG500 incorporates a contact closure interface which automatically detects and signals the connected computer and initiates an unattended, orderly shutdown.

#### Applications:

Wherever common mode noise, harmonics, frequency & phase shift are a problem and an isolation transformer is needed:

- Off-shore oil and gas exploration
- Computer, file-server & network protection
- Medical and lab equipment
- Test equipment
- Locations with poor or missing ground systems
- Locations with high power demands that internally generate high voltage transients and noise that may damage your sensitive electronic equipment.

## SSG Series Model -1 On-line UPS (120Vac Input/Output)

MODEL		SSG500VA-1	
RATED POWER	@ p.f. = 0.7	500VA	
INPUT	Voltage	120Vac, +10%, -30% (without battery discharge)	
	Current	8A	
	Frequency	45Hz - 65Hz	
OUTPUT	Voltage	120Vac ±3%	
	Current	4.2A (RMS), 11A Repetitive Peak	
	Frequency (Sync.) (Internal)	60 Hz ±0.5Hz 60 Hz ±0.1%	
	Harmonic Distortion	Linear <4% Typical	
	Dynamic Response	±4% for 100% Step Load Change .05 ms Recovery Time	
	Overload (UPS)	110% for 10 minutes; 200% for 0.5 seconds; Sustained excessive overload causes safe shutdown without equipment damage	
	Output Protection	Short circuit & overload Excessive battery discharge	
	Efficiency	85% (Typical)	
BATTERY	DC Voltage	48Vdc	
	Type	12V, 2AH Sealed Lead Acid	
	Backup time.	Full Load Half Load	4 min. 10 min.
	Recharge Time	8 Hours to 90%	
FEATURES	Visual Indicators	Utility Present Inverter On Summary Alarm	
	Audible Alarms	Utility Interrupt, Inverter Failure, Overload, Low Battery	
	Computer Interface	(DB-9) Utility Interrupt, Low Battery & UPS Shutdown	
ENVIRONMENT	Audible Noise	43-46dBA at five feet	
	Operating Temperature	32°F - 104° F (0°C to 40°C)	
	Humidity	10% to 90% non-condensing	
	Altitude	Sea Level to 7,000 Feet	
MECHANICAL	Cooling	Low Velocity Forced Air	
	Input	6' Cord with NEMA Type 5-15P	
	Output	Four NEMA Type 5-15R	
	Weight	22 lbs. (10kg)	
	Dimensions (H x W x D)	2.8 x 13.4 x 15.0 Inches 7 x 34 x 38 cm	
APPROVALS	Agency	UL Listed, cUL, FCC Class A	