



## Uninterruptible Power Systems & Power Conversion Products

### SSG Series® 500VA Frequency Converter

- 50, 60 & 400Hz Frequency Conversion
- True Regenerative On-Line Design
- High Frequency Galvanic Isolation
- High Level Surge Protection
- Wide Input Voltage Window
- Extended Brownout Protection
- Generator Compatible
- Contact Closure Interface
- Compact Size, Lightweight



#### Overview

The SSG500 is one of the smallest 500VA frequency converters available. Simply connect the SSG to any 115-120Vac, 47-450Hz single-phase power source and it will steadfastly regenerate a 120Vac, 50 or 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 frequency converter, 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 when utility loss conditions occur.

Unlike other UPS-type frequency converters, the SSG500 has no internal batteries that will degrade or need replacement. This greatly increases reliability and unit up time, while reducing the overall maintenance hassle and cost.

#### Applications:

- Off-shore oil and gas exploration
- Military 400Hz frequency conversion
- International 50Hz power source
- Protection of process control computers
- Avionics lab small 400Hz source
- Provides computer grade power from any generator

## SSG Series Model -A Frequency Converter (120Vac Input/Output)

MODEL		SSG500-A
RATED POWER	@ p.f. = 0.7	500VA
INPUT	Voltage	120Vac, +10%, -30%
	Current	8A
	Frequency	45Hz - 450Hz
OUTPUT	Voltage	120Vac $\pm$ 3%
	Current	4.2A (RMS), 11A Repetitive Peak
	Frequency (Sync.) (Internal)	50 or 60 Hz $\pm$ 0.5Hz 50 or 60 Hz $\pm$ 0.1%
	Harmonic Distortion	Linear <4% Typical
	Dynamic Response	$\pm$ 4% for 100% Step Load Change .05 ms Recovery Time
	Overload	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)
FEATURES	Visual Indicators	Utility Present Inverter On Summary Alarm
	Audible Alarms	Utility Interr upt, Inverter Failure, Overload
	Computer Interface	(DB-9) Utility Interrupt
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	14 lbs. (6.4)
	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, FCC Class A