

# GE Consumer & Industrial Power Protection

The GE Digital Energy™ SG Series is one of the best performing and most reliable three-phase UPS systems providing critical power protection for a wide range of applications. Every SG Series system operates in VFI mode (Voltage Frequency Independent) yielding the maximum levels of power reliability for all mission-critical processes. The Digital Energy SG Series was developed using GE's Design for Six Sigma methodology to ensure that the product fully meets customer requirements and expectations.

With proven technology the SG Series UPS provides top class reliability and performance. With backfeed protection and compliance to EMC standards the SG Series complies

to current and future standards. Reliability can be further increased by paralleling up to eight UPS units utilising GE's unique RPA™ technology (Redundant Parallel Architecture). With RPA every UPS is controlled in a true peer-to-peer configuration with redundancy in all critical elements and functions, eliminating all single points of failure. The decentralised bypass offers great flexibility to up or down grade the system in case future needs might change.

Through their complete life cycle, all GE UPS systems are fully supported by service teams which provide world-class, 24x7 preventive and corrective services, training and application expertise.

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## features & benefits

- Voltage Frequency Independent (VFI) operation fully compliant with international standards (IEC 62040-3) providing full power protection for demanding critical applications
- Front access for all service and maintenance reducing operational footprint
- Excellent dynamic response preventing the need for oversizing in case of pulsating loads
- Superior Battery Management (SBM) enhances battery lifetime resulting in reduced cost of operation
- Super ECO Mode (user selectable) to reduce energy consumption costs
- Automatic start-up procedure and user friendly interface simplifying UPS operation
- Maintenance bypass integrated in UPS cabinet, no need for external switches
- Redundant cooling fans for highest reliability
- Output power factor 0.9 prevents need to oversize in case of power factor corrected loads
- Low input current harmonics with integrated filter (optional)

# Digital Energy™ SG Series UPS

80/100/120/160/200 kVA three phase 400Vac  
Uninterruptible Power Supply (UPS)



SG Series 100-120 kVA



GE imagination at work

# available options

- Various battery systems for extended back-up times
- Filter to reduce harmonic distortion of input current, integrated in UPS cabinet, no additional cabinet required
- Hybrid filter to obtain <3% input current harmonic distortion
- 12 pulse or 24 pulse rectifiers, digitally controlled, in additional cabinet
- Additional transformers for input/output isolation and voltage adaptation available for all kVA sizes and voltages
- RPA Redundant Parallel Architecture to parallel up to 8 units
- IP31 protection degree
- SNMP plug in card for integration into a computer network
- EMI filter for applications where compliance to EN/IEC62040-2, UPS of category C2 (Class A) (EMC std) is required
- UPS monitoring and management software
- Customer specific colours on request
- ISM Intelligent Synchronisation Module to synchronise the outputs of 2 separate UPS systems
- Halogen free cabling
- Remote monitoring panel

## technical specifications

Topology : VFI (Voltage Frequency Independent) according to IEC 62040-3  
 Technology : IGBT and DSP (Digital Signal Processor)  
 Operating Modes : Double conversion, automatic bypass, super ECO mode, frequency converter, RPA up to 8 units

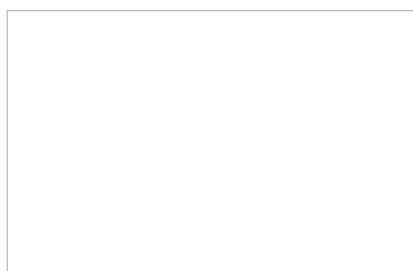
Output power rating (kVA) (at PF = 0.6-0.9 lagging)	80	100	120	160*	200*
Output power rating (kW)	72	90	108	144	180
Output power factor	0.9				
Dimensions (w x d x h), mm	800x800x1820	1200x800x1820		1650x800x1820	
Weight (kg) (160/200 kVA preliminary)	605	830	830	1100	1300
Audible noise	<65 db(A)				
System efficiency	98% on super ECO mode				
Protection degree	IP 20				
Input voltage range	320 - 460 Vac				
Input frequency range	45 - 65 Hz				
Input current THD	< 6% (optional)			< 5% (optional)	
Output voltage	3x380/400/415Vac, user selectable				
Output frequency	50/60 Hz +/- 0.01%				
Output voltage THD at linear load	< 1%				
Output voltage THD at non-linear load	< 3%				
Output voltage regulation static	< +/- 1%				
Output voltage regulation dynamic (100% step load)	< +/- 2% (recovery time < 20 ms)				
Overload capability on inverter	125% 10 min., 150% 1 min.				
Ambient operating temperature	0 - 40 °C				
Colour	RAL 9003, white				
Safety standards	EN/IEC 62040-1-1				
EMC standards	EN/IEC 62040-2 UPS of category C2 optional (Class A)				

\* available Q4 2004

Specifications subject to change without prior notice



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