SGI™ UPSafe™ Solutions

UPSafe 9330 Uninterruptible Power System

Features and Benefits

- Maximum Availability – true double-conversion online design is proven technology used for the most critical applications in the world
- Maximum Reliability – award-winning, patented Hot Sync® technology achieves paralleling for redundancy and capacity (up to four modules) with no system-level single-point-of-failure
- Enhanced battery recharge time quickly prepares the uninterruptible power system for the next power outage
- Network Transient Protector isolates equipment from "back door" power surges travelling through network and phone lines
- Hot-Swappable batteries simplify service
- LanSafe III power management software bundle ensures data integrity

Designed specifically to meet the high availability needs of critical 24x7 applications for small to medium-size businesses, UPSafe 9330 delivers enhanced systems reliability and the highest efficiency ratings of any online uninterruptible power system in the 10-40 kVA range. UPSafe 9330 also contains high-end features and benefits that only existed in larger capacity uninterruptible power systems, until now.

With the introduction of UPSafe 9330, SGI provides IT managers with a state-of-the-art uninterruptible power system designed for optimal efficiency and the highest reliability. This new double-conversion online system integrates technology, software, and service capabilities into a single module capable of supporting critical applications.

By incorporating many features previously found only in power solutions at much higher kVA ratings, such as Hot Sync® wireless paralleling for redundancy and capacity, redundant fans, DC Expert™ battery management system and advanced communications, UPSafe 9330 now offers the highest reliability for critical systems in this power range. Further, UPSafe 9330 provides the lowest total cost of ownership for a double-conversion online uninterruptible power system with its high efficiency Energy Optimizer Mode™ technology.

UPSafe 9330 offers a complete feature set to deliver the highest performance available in the 10-40 kVA range. Whether chosen for an IT or facilities environment, locally or remotely located, UPSafe 9330 is the only choice to keep your business in business – round the clock.

UPSafe 9330 Model Selection Guide

Specification		Model 10 10 kVA/7 kW				Model 15 15 kVA/10.5 kW				Model 20 20 kVA/14 kW			
Input Voltage	Volts	208	480	480	600	208	480	480	600	208	480	480	600
Output Voltage	Volts	208	208	480	208	208	208	480	208	208	208	480	208
Input/Output Frequency	Hz	50/60	60	60	60	50/60	60	60	60	50/60	60	60	60
Input Voltage Range													
Minimum	Volts	177	408	408	510	177	408	408	510	177	408	408	510
Maximum	Volts	228	528	528	660	228	528	528	660	228	528	528	660
AC Input													
Nominal	Amps	22	10	10	8	32	14	15	11	43	19	20	15
Maximum	Amps	29	13	13	10	40	18	18	15	51	23	23	19
Bypass Input													
Nominal Amps	Amps	28	12	12	10	42	18	18	14	56	24	24	19
AC Output													
Nominal Amps	Amps	28	28	12	28	42	42	18	42	56	56	24	56
10 Minutes	Amps	35	35	15	35	52	52	23	52	69	69	30	69
Battery													
Nominal Voltage	Volts	288	288	288	288	288	288	288	288	288	288	288	288
Float Voltage @ 25°C	Volts	336	336	336	336	336	336	336	336	336	336	336	336
Charge Current	Amps	7	7	7	7	7	7	7	7	7	7	7	7
Nominal Discharge Current	Amps	26	26	26	26	39	39	39	39	52	52	52	52
Total Cell Count		144	144	144	144	144	144	144	144	144	144	144	144
System Efficiency													
@ 100% Load	%	91%	88%	86%	86%	92%	89%	87%	87%	92%	90%	88%	90%
@ 75% Load		90%	87%	85%	85%	92%	89%	86%	86%	92%	90%	88%	90%
@ 50% Load[1]		88%	85%	83%	83%	91%	88%	85%	85%	92%	90%	88%	90%
Max. Heat Dissipation													
BTU/Hr. (x1000)		3.3	4.2	4.8	4.8	4.1	5.4	6.3	6.3	5.1	6.3	7.5	6.3
kcal/Hr. (x1000)		0.8	1.1	1.2	1.2	1.0	1.4	1.6	1.6	1.3	1.6	1.9	1.6
Inverter Efficiency (Full Load)	%	93%	93%	90%	93%	94%	94%	92%	94%	94%	94%	92%	94%

1. Efficiency shown takes into account the output and input transformer for input or output voltages other than 208V.

UPS 9330 Battery Runtimes (in minutes)

	10 kVA/7 kW	15 kVA/10.5 kW	20 kVA/14 kW	Installed Weight (lbs)	Cabinet Width (inches)
Internal Battery	35	20	12	–	–
1 external battery cabinet	95	50	35	600	17
2 external battery cabinets	150	95	60	1200	34
3 external battery cabinets	200	130	95	1800	51
4 external battery cabinets	260	165	120	2400	68
5 external battery cabinets	320	215	150	3000	85

This guide provides typical application information. Battery times are approximate and may vary with equipment, configuration, disk access, battery age, temperature, etc.

UPSafe 9330 Technical Specifications[1]

Environmental

- Ambient Temperature: Operation 0 to +40°C (32 to 104°F); Storage -20 to 70°C (-4 to 140°F)
- Relative Humidity: 95% maximum, non-condensing
- Altitude: 1500 meters (5000 ft) at 40°C ambient without load derating
- Audible noise: <55 dBA typical at 1 meter; in accordance with ISO 7779
- Electrostatic Discharge: Withstands 25 kV without damage or disturbance to the load; exceeds requirements of IEC 801-2

EMC: Meets FCC Class A and EN50091-2 (IEC 62040-2) ect

Safety

UL1778
cUL CAN/CSA C22.2 NO.107.1
EN 50091-1

Mechanical

- Cable Entry: Bottom rear, bottom front
- Cooling: Filtered forced air with redundant fans
- Access: Front and top only required for service

Electrical Input

- Input Voltage: 120/208 Vac, 3-phase + GND (rectifier); 120/208 Vac, 3-phase + N + GND (Bypass)
- Voltage Range: -15%, +10%
- Frequency: 50/60 Hz
- Frequency Range: 45 - 65 Hz
- Input Power Factor: >0.96, Typical
- Surge Protection: Meets IEEE 587, Category A & B and EN 50091-2

Electrical Output

- Output Voltage: 120/208
- Voltage Regulation: Static: better than ±1%; Dynamic: better than Figure one of EN50091-3 (IEC 62040-3)
- Voltage Distortion: <3% for 100% linear load; <5% for nonlinear load when tested in accordance with EN50091-3
- Frequency Regulation: Synchronization: ±0.5, ±1.0, ±2.0 Hz, selectable; Free-running: ±0.005 Hz; Slew rate: 0.5, 1.0, 2.0, 3.0 Hz/sec, max selectable
- Over Current: 101 - 110% for 10 min (inverter); 111 - 125% for 1 min (inverter); 126 - 150% for 30 sec (inverter)

Communications

- Serial Port: RS-232 communications port standard
- Service Port: RS-232 for service of equipment by qualified service personnel standard
- Communication Cards: Up to four optional cards can be installed in the UPS module at any time and provide the following connectivity:
  – single RS-232 port
  – multiple RS-232 ports
  – Ethernet Interface
  – SNMP Adapter
  – Modem Driver
- Remote Communications: Four input building alarm contacts; Two summary alarm contacts
- Relay Interface Module: Optional – provides five relay contacts

1. Due to continuing product improvement programs, specifications are subject to change without notice.

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