



SSG Series™ Ultra-Wide Temperature UPS 1kVA-3kVA, 120/230Vac Rack/Tower



Ultra-Wide Temperature Range Protection to 65°C

UL Listed for operation up to 65°C, Falcon Electric's SSG Series ultra-high temperature, double conversion, on-line UPS family is unique in the industry. It has been specifically designed to withstand temperature environments that would destroy other UPS products.

Designed to Provide Reliability and a Long Service Life

Falcon has carefully and precisely designed, selected components and optimized the cooling to create a UPS family that operates successfully in ultra-high temperature environments of -30°C to 65°C (-22°F to 149°F). The batteries used inside the UPS were specifically selected due to their wide operational temperature range of -40°C to 80°C (-40°F to 176°F), far in excess of the maximum 65°C UPS specification. The batteries also have a 10-year service life rating when operated in a normal ambient temperature environment of 72°F.

LED Display & Microprocessor Control

The SSG Series offers instant access to vital UPS and power information through its feature-rich, easy-to-use LED MIMIC graphic display. Through the UPS's next-generation microprocessor technology, users can quickly perform various important functions including load segment control, monitoring and setting the output voltage.

Optional Frequency Converter Capability

Thanks to Falcon's flexible design platform, the SSG Series can be configured as a frequency converter for worldwide power applications.

Accepting a 50/60Hz input and providing a fixed 60Hz or 50Hz output, the SSG Series supplies a tightly regulated output of $\pm 2\%$ and excellent extended brownout protection.

RS-232, USB & SNMP/HTTP UPS Management

With the supplied UPSilon® software, all models support unattended shutdown, UPS management, data logging and a power diagnostic tool. The software supports all Windows® platforms including Version 7 and Server Version 2008 R2, Novell NetWare® 5 & 6, LINUX and FreeBSD. UPSilon for UNIX is available at an additional cost and supports most popular UNIX platform and OS versions.

Falcon's optional SNMP/HTTP agent board provides IPv4 and IPv6 addressable remote management and monitoring over any 10/100 Ethernet LAN, WAN or the Internet. The agent board installs via a communications expansion slot located on the back of every SSG Series model. Client software is supplied that supports the shutdown of multiple workstations and servers via the network.

Remote Emergency Power Off (REPO)

The SSG Series is equipped with an NFPA-70, NEC 645-11 compliant REPO interface assuring easy integration. Remote output receptacle control is an option to REPO, allowing the load segment outlets to be remotely controlled using a wire connected, remote switch.

Typical Rear Panel Configuration



Advanced Features:

- * True Double-Conversion On-line Sinewave Design
- * UL Listed to -30°C to +65°C Operation
- * Ultra-High Temperature User-Replaceable, Hot-Swappable, Battery Packs
- * LED Display with Advanced Monitoring for Easy UPS Management
- * Load Segment Control
- * Remote Emergency Power Off (Standard) or Remote Output Receptacle Control
- * Input Power Factor Correction
- * Wide Input Voltage Window
- * Precision Output Voltage Regulation
- * Extended Brownout, Plus Surge & Transient Protection
- * Optional Extended Battery Banks & Chargers
- * UPSilon® UPS Monitoring & Management Software
- * RS-232C, USB & Optional SNMP/HTTP Agent

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SSG Series™ Ultra-Wide Temperature UPS 1.5kVA - 3kVA

Model Number	SSG1KRP-1 SSG1KRP-2	SSG1.5KRP-1 SSG1.5KRP-2	SSG2KRP-1 SSG2KRP-2	SSG2.5KRP-1 SSG2.5KRP-2	SSG3KRP-1 SSG3KRP-2	
Nominal VA	1000	1500	2000	2500	3000	
Electrical Input						
Nominal AC Voltage	-1 -2	120Vac 208, 220, 230, 240Vac				
AC Voltage Range	-1 -2	80-138Vac 80 – 138Vac				
Frequency		50/60 Hz ± 5% (Auto Tracking)				
Power Factor Correction		> 0.98 (at full load)				
Surge Suppression		IEEE/ANSI C62.41				
Efficiency (Typ.)		> 88%				
Electrical Output						
Watts	700	1050	1400	1750	2400	
AC Voltage (User Programmable)	-1 -2	100, 110, 115 or 120Vac (sinewave) 208, 220, 230 & 240Vac (sinewave)				
Frequency		50/60 Hz (Auto Tracking)				
Frequency Stability		± 0.3% (Battery Mode), ±5% Synchronized to the input frequency in utility mode to the input frequency in utility mode				
Voltage Regulation		± 2%				
Step Load Change		± 7% for 100% load variation, recovery in 5ms				
Harmonic Distortion		< 3% Linear Load, < 5% Non-Linear Load				
Overload		105% for 120 Seconds, 110% for 50 Seconds, 150% for 20 Seconds				
Crest Ratio		3:1				
Battery						
DC Bus Voltage	48Vdc	96Vdc				
Battery Pack Type	Hot-Swappable Pack Separate Enclosure from the UPS Module, User-Replaceable, Hot-Swappable					
Battery Type	Std. & Universal Extended Battery Module					
SSGLi-4 Ten-Year Lithium-Ion Battery	4 each, wide temperature range (-60C to +80C), Maintenance-Free, Sealed VRLA, 12Vdc, 5AH					
SSGLi-4 Ten-Year Lithium-Ion Battery	4 each, limited temperature range (-20C to +58C), Maintenance-Free, Lithium-Ion 12Vdc, 4.6AH					
SSGLi-4 Ten-Year Lithium-Ion Battery	8 each, limited temperature range (-20C to +58C), Maintenance-Free, Lithium-Ion 12Vdc, 4.6AH					
Back Up Time	With SSG-H VRLA With SSGLi-4 Lithium Ion With SSGLi-8 Lithium Ion	5 minutes / 16 minutes 9.5 minutes / 20 minutes 28.5 minutes / 60 minutes	12.5 Minutes N/A N/A	8.5 Minutes N/A N/A	5 Minutes N/A N/A	3.5 Minutes N/A N/A
Recharge Time		6 Hours to 90%				
Battery Life vs. Temperature		10 Years @ 25°C (77°F) Operation 1 Year @ 55°C (122°F) Operation				
Transfer Time						
Line Fails/Recovers		Zero				
UPS to Bypass or Reverse		< 4ms				
After Overload		Auto Transfer to UPS				
With Frequency Converter Options		Bypass Disabled				
Electrical Connections						
Input	-1 -2	6' Cord with 5-15P Plug 6' Cord with Schuko	6' Cord with 5-15 P 6' Cord with Schuko	6' Cord with 5-20P 6' Cord with Schuko	6' Cord with L5-30P 6' Cord with Schuko	6' Cord with L5-30P 6' Cord with Schuko
Output	-1 -2	(8) 5-15R (8) IEC320			(4) 5-15R & (1) L5-20R (8) IEC320	
Environmental						
Temperature	Operational Storage	-30°C - 65°C (-22°F to 149°F) (SSGKRP-3K-x, -30°C to 60°C) Note: with Lithium-Ion battery option -20° to +58°C all models -30°C to 65°C (-22°F to 149°F) At temperatures above 25°C battery life will be reduced				
Humidity		10% to 95% Non – Condensing				
Altitude		10,000 Feet (3000 meters) without derating				
Cooling		Low Velocity Forced Air Fans				
Audible Noise	(@ 1 Meter)	<50dBA				
Controls & Indicators						
LED Display		MIMIC Graphical Display, Input/Output Load Percentage, Alarm, Inverter, Battery Level				
Audible Alarms		DC Mode, Low Battery, Over/Under Voltage, Over/Under Frequency, High Temp., Over Load, Fault Alarm				
Load Segment Control		Two programmable load segments, one continuous load segment				
Remote Emergency Power Off (or)		(Standard) Meets NFPA 70, NEC 645-11 (REPO connections located on the UPS rear panel)				
Remote Output Receptacle Control		(Optional) UPS Load Segment Controlled Output Receptacles can be turned off and on using a remote isolated switch contact.				
Communications		USB Port, RS-232C Serial Port, Optional SNMP/HTTP Agent Board (UPS Bundled UPSilon Software)				
Mechanical						
Dimensions	inches (mm), H x W x D (2U) UPS Module	(2U) 3.5 x 16.8 x 18.8 (88.5 x 426 x 477) (Industrial grade, rugged construction)				
SSGH-B Ten-Year VRLA Battery Module		(2U) 3.5 x 16.8 x 18.8 (88.5 x 426 x 477) (Industrial grade, rugged construction)				
SSGLi-4 Ten-Year Lithium-Ion Battery		(2U) 3.47 x 16.75 x 18.68 (88.14 x 425.45 x 474.5) (Mil. Std. rugged construction)				
SSGLi-4 Ten-Year Lithium-Ion Battery		(2U) 3.47 x 16.75 x 18.68 (88.14 x 425.45 x 474.5) (Mil. Std. rugged construction)				
Weight	lb. (kg) (2U) UPS Module	28.7 (13.01)	35.24 (16)			
SSGH-B Ten-Year VRLA Battery Option		38.55 (17.49)	58.15 (26.4)			
SSGLi-4 Ten-Year Lithium-Ion Battery Option		25.4 (11.48)	N/A			
SSGLi-8 Ten-Year Lithium-Ion Battery Option		32.9 (13.93)	N/A			
Agency Approvals		UL 1778, CUL, FCC Class B, CE				