



# 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

Falcon Electric, Inc.  
5116 Azusa Canyon Road  
Irwindale, CA 91706  
Toll-Free: 800.842.6940  
Tel: 626.962.7770  
Fax: 626.962.7720  
Email: [sales@falconups.com](mailto:sales@falconups.com)  
[www.falconups.com](http://www.falconups.com)

# 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	
<b>Electrical Input</b>						
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%				
<b>Electrical Output</b>						
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				
<b>Battery</b>						
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				
<b>Transfer Time</b>						
Line Fails/Recovers		Zero				
UPS to Bypass or Reverse		< 4ms				
After Overload		Auto Transfer to UPS				
With Frequency Converter Options		Bypass Disabled				
<b>Electrical Connections</b>						
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	
<b>Environmental</b>						
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				
<b>Controls &amp; Indicators</b>						
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)				
<b>Mechanical</b>						
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				