



SSG-HW Series™ Industrial-Grade UPS Plus® 2.2kVA-3kVA, Hardwire, Rackmount



Industrial-Grade Protection for a Wide Range of Applications

Protecting industrial equipment and other demanding environments against power disturbances can be a challenge unless you use the SSG-HW™ Industrial-Grade On-line UPS. The SSG-HW Series is designed to handle harsh power environments.

Designed for Hardwire Industrial Applications

Due to its rugged design, the SSG-HW Series is UL Listed for use in hardwired industrial applications. Moreover, unlike Off-line and Line-interactive designs, the Falcon SSG-HW UPS acts as an electronic firewall between the incoming "dirty" power sources and sensitive microprocessor based equipment. The double-conversion On-line SSG-HW Series continuously supplies clean, tightly regulated power regardless of the incoming power quality. This feature is critical for industrial environments. In addition to utility power pollution, localized power pollution being generated by motors, process equipment, welders, robotics, etc. is also eliminated.

Plus 10-Year Rated Batteries

Batteries are the life blood of all UPSs, but are costly to replace. All SSG-HW Series models are equipped with batteries having an 8 to 10 year life expectancy in a typical 70°F to 80°F environment. This doubles the average UPS battery life and cuts the battery replacement cost in half over the life of the UPS.

When battery replacement is required simply slide out the user-replaceable, hot-swappable battery pack and replace with a new one. Replacement is accomplished while the UPS continues to power the critical load and without having to remove the UPS from the equipment rack.

Plus Optional Frequency Converter Capability

Thanks to Falcon's flexible design platform, the SSG-HW 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-HW Series supplies a tightly regulated output of $\pm 2\%$ and excellent extended brownout protection.

Plus 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.

Plus Remote Emergency Power Off (REPO)

The SSG-HW 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.

Advanced Features:

- * True Double-Conversion On-line Sinewave Design
- * Hot-Swappable, 10-Year Rated Batteries
- * LCD 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
- * For Hardwire Applications
- * UPSilon® UPS Monitoring & Management Software
- * RS-232C, USB & Optional SNMP/HTTP Agent

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SSG-HW Series™ Industrial-Grade UPS PLUS® 2.2kVA - 3kVA

Model Number	SSG2.2RM-1-HW SSG2.2RM-2-HW	SSG3KRM-1-HW SSG3KRM-2-HW
Nominal VA	2200	3000
Electrical Input		
Nominal AC Voltage	-1 Models = 120Vac -2 Models = 208-240Vac	
AC Voltage Range	-1 Models = 80-138Vac -2 Models = 160-276Vac	
Frequency	50/60 Hz ± 5% (Auto Tracking)	
Power Factor Correction	> 0.97	
Surge Suppression	IEEE/ANSI C62.41	
Efficiency (Typical)	> 87%	
Electrical Output		
Watts	1540	2100
AC Voltage (User Programmable)	-1 Models = 100, 110, 115 or 120Vac (sinewave) -2 Models = 208, 220, 230, 240Vac (Sinewave)	
Frequency	50/60 Hz (Auto Tracking or user programmable fixed 50 or 60Hz modes)	
Frequency Stability	± 0.3% (Battery Mode), ±5% Synchronized to the input frequency in utility mode	
Voltage Regulation	Voltage Regulation	
Step Load Change	± 7% for 100% load variation, recovery in 5ms	
Harmonic Distortion	< 3% Linear Load, < 5% Non-Linear Load	
Overload	150% for 10 seconds, 110% for 20 seconds, 105% for 50 seconds	
Crest Ratio	3:1	
Battery		
DC Bus Voltage	96Vdc	
Back Up Time	@Full Load 8 minutes @1/2 Load 20 minutes	6 minutes 18 minutes
Battery Pack Type	User-Replaceable, Hot-Swappable individual 48Vdc packs Battery packs are replaceable through the front panel without removing the UPS, battery bank or EBM from the rack Long-life, 8 to 10 Year, Maintenance-Free, Sealed VRLA Batteries, 12Vdc, 7AH	
Number of Battery Packs (48Vdc)	(2)	
Recharge Time	8 Hours to 90%	
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 Models = 6' line cord with 5-20P -2 Models = 6' line cord with Schuko The plug may be removed and cord used to hardwire	-1 Models = 6' line cord with L5-30P -2 Models = 6' line cord with Schuko The plug may be removed and cord used to hardwire
Output	Hardwire Terminal Block	
Environmental		
Temperature	Operational Storage	-20°C to +40° C (-4°F to 104°F) -15°C to +50°C (5°F to 122°F)
Humidity		10% to 95% Non – Condensing
Altitude		10,000 Feet (3000 meters) without derating
Cooling		Low Velocity Forced Air Fans
Heat Dissipation (BTU/Hour)	784	1071
Audible Noise @ 1 Meter	<50dBA	
Controls & Indicators		
LCD Display	MIMIC Graphical Display, Input/Output Voltage, Frequency & Load, Alarm, Programmable settings & UPS state icons	
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 UPS inches (mm)	(2U) 3.5 x 16.8 x 21.3 (88.5 x 426 x 540)	
H x W x D		
Standard Battery Module	(2U) 3.5 x 16.8 x 21.3 (88.5 x 426 x 540)	
	(2U) 3.5 x 16.8 x 21.3 (88.5 x 426 x 540)	
Weight lb. (kg)	UPS Battery Bank	32 (14.5) 70.6 (32.1)
Agency Listing	-1 Models = UL 1778, CUL, FCC Class B -2 Models = CE	

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