

SSG-RP-1H 800VA-2KVA INDUSTRIAL UPS EXTREME TEMPERATURE OPTION RACKMOUNT D A T A S H E E T

Overview

Built for extremes, Falcon's SSG-RP keeps mission-critical systems online from -30° to $+65^{\circ}\text{C}$, with 10-year batteries, true on-line reliability, expandable runtime, NEMA enclosures, and secure integration for monitoring and control.

Key Advantages

- **Ultra-wide temperature range:** Reliable operation in harsh environments from -30°C to $+65^{\circ}\text{C}$, ensuring stable performance in extreme heat or cold—indoors or out.
- **Long battery life:** Extreme-temperature batteries deliver a 10-year life (at 25°C), providing predictable performance and easier lifecycle planning.
- **Lower service costs & longer service life:** Rugged, true on-line industrial design and robust components reduce replacements and maintenance, maximizing uptime and total cost of ownership.
- **Scalable runtime & options:** Expandable battery banks extend backup from minutes to hours. Optional NEMA enclosures, environmental protection, remote management, sensors, relay I/O, and maintenance bypass simplify deployment.
- **Integration & control:** Standard USB/RS-232 with optional secure SNMP/HTTP, dry-contact relays, REPO, and load-segment control streamline SCADA/BMS integration and remote supervision.
- **Quality Engineering:** Falcon Electric is a recognized authority in developing reliable, quality industrial UPS solutions. Our technical expertise ensures you find the right solution the first time.



SSG-RP-1H 800VA-2KVA INDUSTRIAL UPS EXTREME TEMPERATURE OPTION RACKMOUNT

D A T A S H E E T

Model Number	SSG800RP-1H	SSG1.5KRP-1H	SSG2KRP-1H
Nominal VA	800	1500	2000
Electrical Input			
Nominal AC Voltage	120Vac		
AC Voltage Range	80Vac to 138Vac		
Frequency	50/60 Hz \pm 5% (Auto Tracking)		
Power Factor Correction	>0.98 (at full load)		
Surge Suppression	IEEE/ANSI C62.41		
Efficiency (Typ.)	88%		
Electrical Output			
Watts	560	1050	1400
AC Voltage (User Programmable)	100, 110, 115 or 120Vac (sinewave)		
Frequency	50/60 Hz (Auto Tracking)		
Frequency Stability	\pm 0.3% (Battery Mode), \pm 5% Synchronized to the input frequency in utility mode		
Voltage Regulation	\pm 2%		
Step Load Change	\pm 7% for 100% load variation, recovery in 5ms		
Harmonic Distortion	< 3% Linear Load, < 5% Non-Linear Load		
Overload	110% for 40 seconds, 125% for 18 seconds, 150% immediate		
Crest Ratio	3:1		
Battery			
DC Bus Voltage (nominal)	48Vdc	96Vdc	
Battery Pack Type	Hot-Swappable Pack Separate Enclosure from the UPS Module, User-Replaceable		
Battery Type (Std. Battery Module)	4 or 8 each, wide temperature range (-40°C to 80°C), Maintenance-Free, Sealed VRLA, 12Vdc, 5Ah		
Battery Runtimes (SSGH-B VRLA) Full/Half Load in Minutes	9 / 25	12.5 / 29	7.2 / 20.5
Recharge Time	6 Hours to 90%		
Transfer Time			
Line Fails/Recovers	Zero		
UPS to Bypass or Reverse	< 4ms		
After Overload	Auto Transfer to UPS		
Electrical Connections			
Input	6' Cord with 5-15P		6' Cord with 5-20P
Output	(8) 5-15R		(4) 5-15R & (1) L5-20R
Environmental			
Temperature Operational & Storage	-40°C to 70°C (-40°F to 158°F) Note: When operated in temperatures above 25°C, the battery service life will be reduced.		
Humidity	10% to 95% Non – Condensing		
Altitude	10,000 Feet (3,000 meters) without derating		
Cooling	Low Velocity Forced Air Fans		
Heat Dissipation BTU/Hour	286	535	714
Audible Noise (@ 1 Meter)	<50dBA		
Protection	Conformal coating of boards; Powder-coated chassis; Encapsulated fans		
Controls & Indicators			
LED Display	Line, Inverter, Battery, Bypass, Battery %, Load %, Alarm, Charger, Overload		
Audible Alarms	DC Mode, Low Battery, Over/Under Voltage, Over/Under Frequency, High Temp., Overload, 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 - For mounting dimensions, contact factory.			
Dimensions H x W x D inches (mm)			
(2U) UPS Module	(2U) 3.5 x 19 x 20.8 (88.9 x 482.6 x 528.3)	(2U) 3.5 x 19 x 20.1 (88.9 x 482.6 x 510.5)	
SSGH-B Battery Module	(2U) 3.5 x 19 x 20.2 (88.9 x 482.6 x 513.1)		
Weight lb. (kg)	(2U) UPS Module 31.9 (14.5)	35.3 (16)	
SSGH-B Battery Module	37.4 (17)	58.2 (26.4)	
Agency Approvals	UL Recognized under UL1778, Fifth Edition		

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DATASHEET

SSG-RP-1H UPS Options			
Extended Battery Bank Options - VRLA			
Extended Battery Bank Model Numbers	SSGH-B	SSGH-B1	
Battery Type	10-Year Rated, Maintenance-Free, Sealed VRLA Batteries, 12Vdc, 5Ah		
Temperature Operational & Storage	-40°C to 70°C (-40°F to 158°F) When operated in temperatures above 25°C, the battery service life will be reduced. Batteries stored at 50°C will require monthly recharging and have a reduced service life.		
Internal 2A Charger	No	Yes	
Charger Input Voltage & Current	None	120Vac, 2.5A	
Dimensions H x W x D inches (mm)	(2U) 3.5 x 19 x 20.2 (88.9 x 482.6 x 513.1)		
Weight lb. (kg)	Extended Battery Module = 58.2 (26.4)		Extended Battery Module = 60.2 (27.3)
For mounting dimensions, contact factory.			
Extended Battery Runtimes - VRLA			
(Note: Stated battery runtimes are identical for SSGH-B, SSGH-B1, SSGH-B2 battery banks and are stated by UPS models below)			
UPS Model Numbers	SSG800RP-1H	SSG1.5KRP-1H	SSG2KRP-1H
Battery Runtimes by Model Full/Half Load in Minutes	560W / 280W	1050W / 525W	1400W / 700W
UPS as Shipped	9 / 25	12.5 / 29	7.2 / 20.5
One Extended Battery Bank	58 / 128	32 / 68	22 / 50
Two Extended Battery Banks	98 / 200	50.5 / 115	38 / 84
Three Extended Battery Banks	135 / 270	74 / 155	52 / 116
Four Extended Battery Banks	170 / 340	98 / 200	69 / 150
Note: Battery runtimes may vary depending on temperature, battery age and condition. To extend battery runtime for many hours, 40Ah battery bank/charger option is available (5U height). See datasheet.			
External Maintenance Bypass Switch Option*			
Bypass Switch Model Numbers	MB2K-1		
Model Selection	MB2K-1 used with SSG800RP-1H, SSG1.5KRP-1H, SSG2KRP-1H		
Nominal Input/Output Voltage	120Vac		
VA Rating	2000		
Switch Type	Make-Before-Break		
Utility Input and Load Output Connection	Hardwire		
UPS Input Connection	L5-20R		
UPS Output Connection	6' Line Cord with L5-20P		
Dimensions H x W x D inches (mm)	9.9 x 12.6 x 5.3 (251.5 x 320 x 134.6)		
Weight lb. (kg.)	11 lbs. (5 kg)		
Agency Approvals	UL 1778, cUL		
*Note: Installation of MBS requires the installation of one UA88246 contact interface card inside the UPS communications card slot.			

