



SSG Industrial Wide-temperature UPS

1.5kVA to 3kVA, 120/230Vac Rack/Tower



SSG Industrial UPS Advantages:

- **-20°C to 55°C temperature range**
The SSG UPS is **agency-certified** (UL, cUL, CE) to operate reliably in demanding environments. All 120V models are also UL 508 listed.
- **Long-life UPS:**
true on-line, industrial
Tested and designed with robust components and materials, the SSG assures reliable operation and a long service life in stressful environments. It is a true on-line industrial UPS.
- **12-year rated batteries cut service costs**
The long-life batteries cut frequent battery replacements and maintenance costs. They have a 12-year life at 25°C and **4 years** at 50°C.
- **Extended battery banks**
The battery banks are easily expandable to provide minutes to hours of extra battery runtime.
- **Available options / Advanced communications**
NEMA 3R-rated enclosures, environmental protection, remote UPS management, environment sensors, relay cards – and much more.
- **Falcon – recognized for quality and reliability**
Falcon Electric is a recognized authority in industrial UPS solutions. Our technical expertise assures you find the right solution – the first time.

SSG Industrial Wide-temp UPS

Rack/Tower 1.5kVA to 3kVA

Model Number	SSG1.5KRM-1 SSG1.5KRM-2	SSG2.2KRM-1 SSG2.2KRM-2	SSG3KRM-1 SSG3KRM-2
Nominal VA	1500	2200	3000
Electrical Input			
Nominal AC Voltage	-1 Models: 120Vac, -2 Models: 208, 220, 230, 240Vac		
AC Voltage Range	-1 Models: 80-138Vac, -2 Models: 160-276Vac		
Frequency	50/60 Hz ± 5% (Auto Tracking)		
Power Factor Correction	>0.97 (at full load)		
Surge Suppression	IEEE/ANSI C62.41		
Efficiency (Typ.)	88%		
Electrical Output			
Watts	1050	1540	2100
AC Voltage (User Programmable)	-1 Models: 100, 110, 115 or 120Vac (sine wave) -2 Models: 208, 220, 230 or 240Vac (sine wave)		
Frequency	50/60 Hz (Auto Tracking)		
Frequency Stability	± 0.3% (Battery Mode), ± 5% Synchronized 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	110% for 40 seconds, 125% for 18 seconds, 150% immediate		
Crest Ratio	3:1		
Battery			
DC Bus Voltage (nominal)	48Vdc	96Vdc	
Battery Pack Type	User-Replaceable, Hot-Swappable Pack Separate Enclosure from UPS Module (Internal Pack for 1.5kVA)		
Battery Type	12-Year Rated, Maintenance-Free, Sealed VRLA Batteries, 12Vdc, 7Ah		
Battery Runtimes Full/Half Load in Minutes	6 / 18	10 / 27	6 / 18.9
Recharge Time	8 Hours to 90%		
Transfer Time			
Line Fails/Recovers	Zero		
UPS to Bypass or Reverse	< 4ms		
After Overload	Auto Transfer to UPS		
Electrical Connections - For hardwired models, contact factory.			
Input	-1 6' Cord with 5-15P Plug -2 6' Cord with Schuko Plug	6' Cord with 5-20P Plug 6' Cord with Schuko Plug	6' Cord with L5-30P Plug 6' Cord with Schuko Plug
Output	-1 (8) 5-15R -2 (4) IEC320 C13 Outlets	(4) 5-15R & (1) L5-20R (4) IEC320 C13 Outlets	(4) 5-15R & (1) L5-30R (4) IEC320 C13 Outlets
Environmental			
Temperature	Operational Storage	-20°C to 55°C (-4°F to 131°F) When operated in temperatures above 25°C, the battery service life will be reduced. -20°C to 55°C (-4°F to 131°F) Batteries stored at 50°C will require monthly recharging and have a reduced service life.	
Humidity	10% to 95% Non – Condensing		
Altitude	10,000 Feet (3,000 meters) without derating		
Cooling	Low Velocity Forced Air Fan		
Heat Dissipation	BTU/Hour	535	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., Overload, Fault Alarm		
Load Segment Control	Two programmable load segments, one continuous load segment (Except on -2 models)		
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.			
UPS Dimensions H x W x D inches (mm)	(2U) 3.5 x 19 x 22.5 (88.9 x 482.6 x 571.5) (None - Batteries inside UPS)	(2U) 3.5 x 19 x 21.9 (88.9 x 482.6 x 556.3)	
SSGR Battery Module	(2U) 3.5 x 19 x 21.3 (88.9 x 482.6 x 541)		
Weight lb. (kg)	(2U) UPS Module = 32 (14.5)		(2U) UPS Module = 32 (14.5)
12-Year VRLA Batteries	UPS with Internal batteries = 55 (24.9)	(2U) External Battery Module = 70.6 (32)	(2U) External Battery Module = 70.6 (32)
Agency Approvals	-1 Models: UL 1778, UL 508, cUL, FCC Class B; -2 Models: CE, UL 1778, cUL		

SSG UPS Options						
Extended Battery Bank Options - VRLA						
Extended Battery Bank Model Numbers		SSGR		SSGR-1	SSGR-2	
Battery Type		12-Year Rated, Maintenance-Free, Sealed VRLA Batteries, 12Vdc, 7Ah				
Temperature		Operational			-20°C to 55°C (-4°F to 131°F) When operated in temperatures above 25°C, the battery service life will be reduced.	
		Storage			-20°C to 55°C (-4°F to 131°F) 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	208Vac to 240Vac, 2.5A	
Dimensions H x W x D		inches (mm) (2U) 3.5 x 19 x 21.3 (88.9 x 482.6 x 541)				
Weight		lb. (kg)		Extended Battery Module = 70.6 (32)		Extended Battery Module = 72.6 (32.9)
For mounting dimensions, contact factory.						
Extended Battery Runtimes - VRLA						
(Note: Stated battery runtimes are identical for SSGR, SSGR-1, SSGR-2 battery banks and are stated by UPS models below)						
UPS Model Numbers		SSG1.5KRM-1 SSG1.5KRM-2		SSG2.2KRM-1 SSG2.2KRM-2	SSG3KRM-1 SSG3KRM-2	
Battery Runtimes by Model		1050W / 525W		1540W / 770W	2100W / 1050W	
Full/Half Load in Minutes						
UPS as Shipped		6 / 18		10 / 27	6 / 18.9	
One Extended Battery Bank		23.7 / 60.5		20.6 / 52	13 / 34.4	
Two Extended Battery Banks		48.6 / 118		36.3 / 90	23.8 / 60.6	
Three Extended Battery Banks		76.9 / 178		54 / 128.3	35.5 / 88.9	
Four Extended Battery Banks		106 / 241		73 / 170	48.5 / 118.1	
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.						
Lithium Iron Phosphate (LiFePO ₄) Battery option also available. See datasheet.						
Communications Options						
Internal COM Board Model Numbers		UA88376-SSG		UA88376-SSG-HW	SNMP-SG-4	SNMP-MEGA-INT
Type		Dry Relay Signal Interface			Ultra Secure SNMP/HTTP	Secure SNMP/HTTP
COM Interface		DB-9F		Hardwire Terminal Block	10/100 Ethernet (RJ45)	
Communications Specifications		Dry contact for: Utility Loss, Low Battery, Summary Alarm & On Bypass, Remote Shutdown while on Battery			Internet-based remote UPS monitoring and management via SNMP/HTTP	
External COM Board Model Numbers					SNMP-SG-5	SNMP-MEGA-EXT
Type					Ultra Secure SNMP/HTTP	Secure SNMP/HTTP
COM Interface					10/100 Ethernet (RJ45)	
Communications Specifications					Internet-based remote UPS monitoring and management via SNMP/HTTP	
External Maintenance Bypass Switch Option*						
Bypass Switch Model Numbers		MB2K-1, MB2K-2			MB3K-1, MB3K-2	
Model Selection		MB2K-1 used with SSG1.5KRM-1 MB2K-2 used with SSG1.5KRM-2			MB3K-1 used with SSG2.2KRM-1 MB3K-2 used with SSG2.2KRM-2	MB3K-1 used with SSG3KRM-1 MB3K-2 used with SSG3KRM-2
Nominal Input/Output Voltage		-1, 120Vac and -2, 208Vac to 240Vac				
VA Rating		2000			3000	3000
Switch Type		Make-Before-Break				
Utility Input and Load Output Connection		Hardwire				
UPS Input Connection		-1 L5-20R			L5-30R	
		-2 L6-20R			L6-20R	
UPS Output Connection		-1 6' Line Cord with L5-20P			6' Line Cord with L5-30P	
		-2 6' Line Cord with L6-20P			6' Line Cord with L6-20P	
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 Maintenance Bypass Switch requires the installation of one UA88376-SSG contact interface card inside the UPS communications card slot.						

Typical SSG Rear Panel Configuration



SSG UPS with Hot-Swappable Battery Pack

