



SSG Industrial Wide-temperature UPS

1.5kVA to 3kVA, 120/230Vac Rackmount



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 is 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

Rackmount 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 \pm 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	\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	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
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)
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 (LiFePO₄) 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

