



# SSG Industrial Wide-temperature UPS

## 1.5kVA to 3kVA, 120/230Vac 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.
- **Extended battery banks**  
The battery banks are easily expandable to provide minutes to hours of extra battery runtime.
- **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.
- **Available options / Advanced communications**  
NEMA 3R-rated enclosures, environmental protection, remote UPS management, environment sensors, relay cards – and much more.
- **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.
- **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

# Tower 1.5kVA to 3kVA

Tower Model Number		SSG1.5K-1T SSG1.5K-2T	SSG2.2K-1T SSG2.2K-2T	SSG3K-1T SSG3K-2T
Nominal VA		1500	2200	3000
<b>Electrical Input</b>				
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%		
<b>Electrical Output</b>				
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		
<b>Battery</b>				
DC Bus Voltage (nominal)		48Vdc	96Vdc	
Battery Pack Type		User-Replaceable, Hot-Swappable (Batteries are replaceable through the front panel)		
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%		
<b>Transfer Time</b>				
Line Fails/Recovers		Zero		
UPS to Bypass or Reverse		< 4ms		
After Overload		Auto Transfer to UPS		
<b>Electrical Connections</b>				
Input	-1	6' Cord with 5-15P Plug	6' Cord with 5-20P Plug	6' Cord with L5-30P Plug
	-2	6' Cord with Schuko Plug	6' Cord with Schuko Plug	6' Cord with Schuko Plug
Output	-1	(8) 5-15R	(4) 5-15R & (1) Duplex 5-20R	(4) 5-15R & (1) 5-20R & (1) L5-30R
	-2	(4) IEC320 C13 Outlets	(4) IEC320 C13 / (1) IEC320 C19 Outlets	(4) IEC320 C13 / (1) IEC320 C19 Outlets
<b>Environmental</b>				
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		
<b>Controls &amp; Indicators</b>				
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		Includes programmable and/or continuous load segment(s); varies by model.		
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>				
UPS Dimensions H x W x D inches (mm)		11.1 x 7.6 x 18 (281.9 x 193 x 457.2)	14 x 10 x 19.2 (355.6 x 254 x 488)	
Weight	lb. (kg)	UPS & Internal VRLA Batts - 55.2 (25)	UPS & Internal VRLA Batts - 92.6 (42)	UPS & Internal VRLA Batts - 92.6 (42)
Agency Approvals		-1 Models: UL 1778, cUL, FCC Class B; -2 Models: CE, UL 1778, cUL		

SSG UPS Options			
Extended Battery Bank Options - VRLA			
Extended Battery Bank Model Numbers	SSGB	SSGB-1	SSGB-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)	14 x 10 x 19.2 (355.6 x 254 x 488)	
Weight	lb. (kg)	Extended Battery Module = 114 (51.7)	Extended Battery Module = 116 (52.7)
Extended Battery Runtimes - VRLA			
<b>(Note: Stated battery runtimes are identical for SSGB, SSGB-1, SSGB-2 battery banks and are stated by UPS models below)</b>			
UPS Model Numbers	SSG1.5K-1T SSG1.5K-2T	SSG2.2K-1T SSG2.2K-2T	SSG3K-1T SSG3K-2T
<b>Battery Runtimes by Model</b>	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	48.7 / 118	36.3 / 90	23.8 / 60.6
Two Extended Battery Banks	106 / 241	73 / 170	48.5 / 118.1
<b>Note: Battery runtimes may vary depending on temperature, battery age and condition.</b>			
External Maintenance Bypass Switch Option*			
Bypass Switch Model Numbers	MB2K-1, MB2K-2	MB3K-1, MB3K-2	
Model Selection	MB2K-1 used with SSG1.5K-1T MB2K-2 used with SSG1.5K-2T	MB3K-1 used with SSG2.2K-1T MB3K-2 used with SSG2.2K-2T	MB3K-1 used with SSG3K-1T MB3K-2 used with SSG3K-2T
Nominal Input/Output Voltage	-1, 120Vac -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 -2 L6-20R	L5-30R L6-20R	
UPS Output Connection	-1 6' Line Cord with L5-20P -2 6' Line Cord with L6-20P	6' Line Cord with L5-30P 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		
<b>*Note: Installation of MBS requires the installation of one UA88246 contact interface card inside the UPS communications card slot.</b>			

Typical Rear Panel Configuration

