

S4K5U-5 6 kVA International On-Line UPS

The S4K5U6000-5 Industrial On-Line UPS Series is designed for international usage and provides flexible output voltage, an integrated maintenance bypass switch and internal batteries all in a slim 5U (8.7") enclosure.

The S4K5U features true On-Line (double conversion) topology providing the ultimate in protection against a wide range of potential power problems. Flexible output voltages (220/230/240 Volt) are available through the configuration program to allow for international use. One of the three L-N output voltages is selected to match the local voltage. Self diagnostics simplify maintenance and troubleshooting, and the UPS can be serviced by the customer. The standard maintenance bypass switch provides an additional level of protection.

The S4K5U also features a wide input voltage window to support the critical load without having to transfer to the battery. This extends system availability when back-up is truly needed.

Features

- True double conversion topology
- Flexible L-N output voltage (220/230/240V)
- Configurable as a Tower or Rack Mount model
- High density, 6 kVA in only 5U of rack space
- Easily installed in 18" to 32" deep rack using rack mount kit # SRS1832
- User replaceable, hot-swappable internal battery module
- Matching 4U Extended Battery Cabinets
- Includes both automatic and manual maintenance bypass switch
- Automatic frequency detection of either 60 or 50 Hz
- Power Factor Correction
- Self-Diagnostics simplify maintenance and troubleshooting
- Remote Emergency Power Off (REPO)
- Intellislot™ Communication port
- Built in Serial Communications and Closure Signals
- Compatible with most standby generators
- Two Year Limited Warranty



Applications

- Industrial Computers
- Robotics and Process Controls
- Industrial Automation Systems
- Network Servers
- Enterprise Telecommunication Systems
- Printing and Publishing Machinery
- Industrial and Commercial Machinery
- Pharmaceutical and Medical Diagnosis Equipment

Related Products

- Portable MCR Power Conditioners
- Surge Protective Devices
- Active Tracking® Filters

Specifications

Catalog Number	S4K5U6000-5
Model Rating	6 kVA / 4,200W
Dimensions inches (mm)	
Unit (H x W x D)	16.9 x 8.7 x 21.5 (430 x 221 x 547)
Shipping (H x W x D)	19.7 x 22.05 x 27.17 (500 x 560 x 690)
Shipping Weight – lbs (kg)	175.3 (79.5)
Input AC Parameters	
Nominal Operating Frequency	50 or 60 Hz (Factory Default = 50)
Factory Default Vac	230 Vac
User Configurable Vac	220/230/240 Vac (May be modified using configuration program)
Operating Voltage Range Without Battery Operation	176 – 276 Vac
Maximum Allowable Vac	276 Vac
Input Frequency Without Battery Operation	40 - 70 Hz
Output AC Parameters	
Factory Default Vac	230 Vac
Frequency	50 Hz or 60 Hz, Nominal
Waveform	Sinewave
Main Mode Overload	>200% for 96 milliseconds; 131 - 199% for 2 seconds; 112- 129% for 10 seconds with transfer to bypass
Battery Parameters	
Type	Valve-regulated, non-spillable, lead acid
Quantity x V	20 x 12V
Back-up Time	See Back-up Times Chart
Recharge Time (Internal Batteries)	3 hrs. to 90% capacity after full discharge into 100% load
Bypass Protection Limits	
Disable Bypass Operation	If input voltage exceeds $\pm 15\%$ of the nominal voltage
Re-enable Bypass Operation	If input voltage returns to within $\pm 10\%$ of nominal output voltage
Disable Bypass operation	When the input frequency prevents synchronous operation
Power Distribution Box	
Amps Rating	32 Amps
Input Power Connection	3-Wire Hardwired, 6-10 mm ² (8-10 AWG)
Output Power Connection	3-Wire Hardwired, 6-10 mm ² (8-10 AWG)
Includes:	Two IEC320 C19 16A/250V sockets, Manual Bypass Switch with Indicator Lamps
Input Branch Circuit Breaker	32A, supplied by user

S4K5U 6 kVA Model Specifications - continued

Environmental	
Operating Temperature	0°C to +40°C (+32°F to +104°F)
Storage Temperature	-15°C to +50°C (+5°F to +122°F)
Relative Humidity	0-95% non-condensing
Operating Elevation	Up to 2000m (6600 ft) at 40°C (104°F) without derating
Storage Elevation	15,000m (50,000 ft.) maximum
Audible Noise	<55 dBA, at 1 meter from the rear <50 dBA, at 1 meter from the front or sides
Agency	
Safety	EN62040-1-1; TUV/GS
EMI/EMC/C–Tick EMC	EN50091-2 and AS 62040-2: 2002, Class A; CE EMC Directive
ESD	EN61000-4-2, Level 4, Criteria A
Radiated Susceptibility	EN61000-4-3, Level 3, Criteria A
Electrical Fast Transient	EN61000-4-4, Level 4, Criteria A
Surge Immunity	EN61000-4-5, Level 3, Criteria A
Transportation	ISTA Procedure 1B

External Battery Specifications

Model Number	S4K240BAT
Used w/ UPS model	S4K5U6000-5
Dimensions – inches (mm)	
Unit with bezel (H x W x D)	16.9 x 6.9 x 20.55 (430 x 176 x 522)
Shipping (H x W x D)	17.9 x 22 x 27.2 (455 x 560 x 690)
Weight – lbs (kg)	
Unit	145 (65)
Shipping	173.1 (78.5)
Battery Parameters	
Type	Valve-regulated, non-spillable, flame retardant, lead acid
Qty x V	20 x 12V
Back-up Time	See Battery Back-up Times chart
Environmental	
Operating Temperature	0°C to +40°C (+32°F to +104°F)
Storage Temperature	-15°C to +50°C (+5°F to +122°F)
Relative Humidity	0-95% non-condensing
Operating Elevation	Up to 2000m (6600 ft.) at 40°C (104°F) without derating
Storage Elevation	15,000m (50,000 ft.) maximum
Agency	
Safety	EN62040-1-1; TUV/GS
Transportation	ISTA Procedure 1B

S4K5U 6 kVA Model Battery Back-up Times

	Load %	6000VA
Internal Battery (minutes)	10%	94
	20%	46
	30%	29
	40%	21
	50%	17
	60%	13
	70%	11
	80%	9
	90%	8
	100%	7
Internal Battery +1 External Battery Cabinet (minutes)	10%	222
	20%	124
	30%	81
	40%	60
	50%	49
	60%	39
	70%	33
	80%	28
	90%	24
	100%	21
Internal Battery +2 External Battery Cabinets (minutes)	10%	350
	20%	197
	30%	135
	40%	105
	50%	85
	60%	70
	70%	58
	80%	50
	90%	43
	100%	38

	Load %	6000VA
Internal Battery +3 External Battery Cabinets (minutes)	10%	478
	20%	269
	30%	185
	40%	145
	50%	123
	60%	101
	70%	85
	80%	73
	90%	63
	100%	55
Internal Battery +4 External Battery Cabinets (minutes)	10%	606
	20%	341
	30%	235
	40%	184
	50%	156
	60%	131
	70%	113
	80%	97
	90%	85
	100%	75

Note:

Back-up times are at 25°C, 77°F, with 100% capacity batteries and resistive loads.

S4K2U, S4K4U, S4K5U and S4K6U Accessories

Hardware for Rack Mount (order part number separately)

Catalog Number	Description	Approx. Ship Weight lbs (kg)
Rack Slide Kits		
SRS1832	Rack slide kit for racks with 18-32" deep support rails.	8 (3.6)

Optional Equipment

Catalog Number	Description
Communications Options	
SNMPWEB CARD	Ethernet communications kit, (Supports SNMP, HTTP and OCP) includes SNMP hardware, MIB, configuration cable and installation manual.
RELAYCARD-INT	Relay contact board, 2 relay contact signals each independently configured for "On Battery", "Low Battery", "On Bypass", "On UPS", "Summary Alarm" and "UPS Fault" (rated at 24V @ 1 Amp AC or DC).

Power A/C Distribution (PAD)

PADs provide output distribution, input connection and a rotary maintenance bypass switch.

The PAD is field installed by the customer and allows the UPS to be removed without interrupting power to the load.

Catalog Number	Description	Series
A2D115HW	120 Volt, Hardwired for use with 15 Amp Input	S4K2U (700 - 1500 VA Models)
A2D120HW	120 Volt, Hardwired for use with 20 amp Input	S4K2U (2000 VA Model)
A2D130HW	120 Volt, Hardwired for use with 30 amp input	S4K2U (3000 VA Model)

Note: PADs can only be used with units having matching receptacles for the line cords provided.

