

SPARK 1KVA/1.5KVA/2KVA/3KVA



Spark 2000 T/3000 T Spark 1000 T/1500 T

- True double-conversion online UPS
- Input power factor correction 0.99
- Output power factor 0.9
- 50Hz/60Hz frequency converter mode
- Programmable power management outlets
- Emergency power off function (EPO)
- ECO mode operation for energy saving
- Very high surge immunity up to 7KV, 13KA, 1300J
- Generator compatible
- High overload capability and enhanced short circuit protection
- SNMP/USB/RS-232 multiple communications
- 3-stage smart charging design
- Maximum 8A extended parallel control available for long run model
- Optional HID Power Device USB Port
- Laser printer and ultrasound system load acceptable

Spark Online UPS Selection Guide

MODEL	SPARK 1000 T	SPARK 1500 T	SPARK 2000 T	SPARK 3000 T		
PHASE	Single phase with ground					
CAPACITY	1000 VA / 900 W	1500 VA / 1350 W	2000 VA / 1800 W	3000 VA / 2700 W		
INPUT						
Nominal Voltage	100/110/115/120/127 VAC or 200/208/220/230/240 VAC					
Voltage Range	55 - 150 VAC ± 5 % or 110 - 300 VAC ± 5 % at 50% load 80 - 150 VAC ± 5 % or 160 - 300 VAC ± 5 % at 100% load					
Frequency Range	40 Hz ~ 70 Hz					
Power Factor	≥ 0.99 @ Nominal Voltage (100% Load)					
THDi	≤ 5% @100~130VAC or 205-245VAC THDU < 1.6% @ input and full linear load condition with battery fully charged					
OUTPUT						
Output Voltage	100/110/115/120/127 VAC or 200/208/220/230/240 VAC					
AC Voltage Regulation (Batt. Mode)	± 1%					
Frequency Range (Synchronized Range)	47~53 Hz or 57~63 Hz					
Frequency Range (Batt. Mode)	50 Hz ± 0.1 Hz or 60Hz ± 0.1 Hz					
Current Crest Ratio	3:1					
Harmonic Distortion	≤ 2 % THD (Linear Load) ; ≤ 4 % THD (Non-linear Load)					
Transfer Time	AC Mode to Batt. Mode	Zero				
	Inverter to Bypass	4 ms (Typical)				
Waveform (Batt. Mode)	Pure Sinewave					
EFFICIENCY						
AC Mode	90%		91%			
ECO Mode	97%					
Battery Mode	89%	89%	89%	90%		
BATTERY						
Standard Model	Battery Type	12 V / 7 Ah	12 V / 9 Ah	12 V / 7 Ah	12 V / 9 Ah	12 V / 7 Ah
	Numbers	3	3	6	6	8
	Typical Recharge Time	4 hours recover to 90% capacity				
	Charging Current (max.)	1.5 A				1.2 A
	Charging Voltage	41.0 VDC ± 1%		82.1 VDC ± 1%		109.6 VDC ± 1%
Long-run Model	Battery Type	Depending on the capacity of external batteries				
	Numbers	3	3	6	6	8
	Charging Current (max.)	1A/2A/4A/6A/8A (Selectable)				
	Charging Voltage	41.0 VDC ± 1%		82.1 VDC ± 1%		109.6 VDC ± 1%
INDICATORS						
LCD Display	UPS status, Load level, Battery level, Input/Output voltage, Discharge timer, and Fault conditions					
ALARM						
Battery Mode	Sounding every 5 seconds					
Low Battery	Sounding every 2 seconds					
Overload	Sounding every second					
Fault	Continuously sounding					
PHYSICAL						
Standard Model	Dimension, DxWxH (mm)	397 x 145 x 220		421 x 190 x 318		
	Net Weight (kgs)	12	13.8	22.5	26.6	32.2
Long-run Model	Dimension, DxWxH (mm)	397 x 145 x 220		421 x 190 x 318		
	Net Weight (kgs)	6.3	6.5	10.5	11.7	11.7
ENVIRONMENT						
Humidity	20-95 % RH @ 0- 40°C (Non-condensing)					
Noise Level	Less than 50dB @1Meter					
MANAGEMENT						
Smart RS-232/USB	Supports Windows® 2000/2003/XP/Vista/2008, Windows® 7/8/10, Linux and MAC					
Optional SNMP	Power management from SNMP manager and web browser					

*Derate capacity to 80% of capacity in Frequency converter mode and to 80% when the output voltage is adjusted to 100VAC, 200VAC or 208VAC. Product specifications are subject to change without further notice.

SPARK Rackmount/Rack Tower 1KVA/1.5KVA/2KVA/3KVA



- True double-conversion
- Output power factor 0.9
- ECO and advanced ECO mode for energy saving
- Output voltage regulation < 1%
- Higher output crest ratio 3:1
- 50Hz/60Hz frequency converter mode
- Programmable power management outlets
- Emergency power off function (EPO)
- Hot swappable battery design
- Optional HID Power Device USB Port

Spark Rackmount/Rack Tower Online UPS Selection Guide

MODEL	Spark 1000 T		Spark 1500 T		Spark 2000 T		Spark 3000 T	
PHASE	Single phase with ground							
CAPACITY*	1000 VA / 900 W		1500 VA / 1350 W		2000 VA / 1800 W		3000 VA / 2700 W	
INPUT								
Nominal Voltage	100*/110*/115*/120 /127 VAC or 200/208/220/230/240 VAC							
Voltage Range	55-150 VAC ± 5% or 110-300 VAC ± 5% @ 50% load 80-150 VAC ± 5% or 160-300 VAC ± 5% @ 100% load							
Frequency Range	40 Hz ~ 70 Hz							
Power Factor	≥ 0.99 @ nominal voltage (100% load)							
THDi	≤ 5% @ nominal input voltage							
OUTPUT								
Output Voltage	100*/110*/115*/120/127 VAC or 200/208/220/230/240 VAC							
AC Voltage Regulation (Batt. Mode)	± 1%							
Frequency Range (Synchronized Range)	57 ~ 63 Hz or 47 ~ 53 Hz							
Frequency Range (Batt. Mode)	60Hz ± 0.1Hz or 50 Hz ± 0.1Hz							
Current Crest Ratio	3:1 (max.)							
Harmonic Distortion	≤ 2% THD (Linear Load) ; ≤ 4% THD (Non-linear Load)							
Transfer Time	AC Mode to Batt. Mode		Zero					
	Inverter to Bypass		4 ms (Typical)					
Waveform (Batt. Mode)	Pure Sinewave							
EFFICIENCY								
AC Mode	90%		90%		91%		91%	
ECO Mode	97%		97%		97%		97%	
Battery Mode	88%	89%	89%	88%	89%	90%		
BATTERY								
Standard Model	Battery Type	12 V / 9 Ah	12 V / 7 Ah	12 V / 9 Ah	12 V / 9 Ah	12 V / 7 Ah	12 V / 9 Ah	
	Numbers	2	3	3	4	6	6	
	Typical Recharge Time	4 hours recover to 90% capacity						
	Charging Current (max.)	1.5 A**						
Long-run Model	Charging Voltage	27.4 VDC ± 1%	41.1 VDC ± 1%	41.1 VDC ± 1%	54.8 VDC ± 1%	82.1 VDC ± 1%	82.1 VDC ± 1%	
	Battery Type	Depending on the capacity of external batteries						
	Numbers	2	3	3	4	6	6	
	Charging Current (max.)	1A/2A/4A/8A (Selectable via LCD setting)						
Charging Voltage	27.4 VDC ± 1%	41.1 VDC ± 1%	41.1 VDC ± 1%	54.8 VDC ± 1%	82.1 VDC ± 1%	82.1 VDC ± 1%		
INDICATORS								
LCD Display	UPS status, Load level, Battery level, Input/Output voltage, Discharge timer, and Fault conditions							
ALARM								
Battery Mode	Sounding every 5 seconds							
Low Battery	Sounding every 2 seconds							
Overload	Sounding every second							
Fault	Continuously sounding							
PHYSICAL								
Standard Model	Dimension, DxWxH (mm)	410 x 438 x 88		410 x 438 x 88	510 x 438 x 88	630 x 438 x 88	630 x 438 x 88	
	Net Weight (kgs)	11.6	14.2	14.5	19.5	26.9	27.4	
Long-run Model	Dimension, DxWxH (mm)	410 x 438 x 88		410 x 438 x 88	410 x 438 x 88		510 x 438 x 88	
	Net Weight (kgs)	6.4		6.5	6.5		10.5	
ENVIRONMENT								
Humidity	20-90 % RH @ 0- 40°C (non-condensing)							
Noise Level	Less than 50dB @ 1 Meter							
MANAGEMENT								
Smart RS-232/USB	Supports Windows® 2000/2003/XP/Vista/2008/7/8/10, Linux and MAC							
Optional SNMP	Power management from SNMP manager and web browser							

*Derate capacity to 95% when the output voltage is adjusted to 115VAC, derate capacity to 90% when the output voltage is adjusted to 110VAC and derate capacity to 80% when the output voltage is adjusted to 100VAC/200VAC/208VAC.

**If standard UPS is equipped with additional charger, the available setting options become 2A, 3A and 4A. Product specifications are subject to change without further notice.