



Desktop Switching Power Supply Built-in Battery Backup Circuit

Model
SEC-1223P-BBM
13.8 VDC
120 VAC
23 Amps

3 YEAR LIMITED WARRANTY



Design Features

- Advanced Switch Mode Technology.
- Reliable, 12V Nominal DC Uninterruptible Power Source (DC UPS) in conjunction with external 12V Lead Acid Battery backup.
- High efficiency, compact and portable.
- Protected against short circuit, overload, over voltage and over temperature
- Cooling by temperature controlled fan improves efficiency and prolongs life of the power supply.

MODEL NO.		SEC-1223P-BBM	
		Input: 115A	Input: 230V
AC INPUT	INPUT VOLTAGE RANGE / FREQUENCY	100-240 VAC / 50/60Hz	
	INPUT CURRENT	3.01A at 120 VAC 3.15A at 115 VAC 3.68A at 100 VAC	1.49A at 240 VAC 1.55A at 230 VAC
	INPUT INRUSH CURRENT ON SWITCHING ON	30A (Cold start)	60A (Cold start)
	INPUT POWER FACTOR AT FULL LOAD	0.99PF	0.97PF
	INPUT NO LOAD POWER DRAW	< 0.17W	< 0.45W
	INPUT PFC SWITCHING FREQUENCY	25 – 68KHz	
OUTPUT	OUTPUT VOLTAGE AT LOAD TERMINALS	<ul style="list-style-type: none"> • When AC Input is available: 13.8 ±0.2 VDC • When AC Input is not available, (unit is in Battery Backup Mode): 13.8 ±0.2 VDC 	
	OUTPUT VOLTAGE AT BATTERY TERMINALS (AC INPUT IS AVAILABLE)	<ul style="list-style-type: none"> • No battery: 13.8 ±0.2 VDC • Battery fully charged and floating: 13.5V ± 0.2V • Battery not fully charged: Up to 11.2V at charging current of 4A 	
	OUTPUT CURRENT AT LOAD TERMINALS (WITHOUT BATTERY)	<ul style="list-style-type: none"> • Rated: 23A • Internal Current Limit: 27.6~29A • External Current Limit: 25A for 100 sec (External 25A Load Side Fuse • Surge: >25A as permitted by the Time Current Characteristics of the 25A Load Side Fuse 	
	OUTPUT CURRENT (BATTERY CONNECTED) AT LOAD TERMINALS	<ul style="list-style-type: none"> • Rated: 19A with simultaneous charging at 4A through Battery Terminals • Current Limit: 25A for 100 sec (External 25A Battery / Load Side Fuse(s) will blow after around 100sec) • >25A as permitted by the Time Current Characteristics of the 25A Battery and Load Side Fuses 	
	OUTPUT CURRENT (BATTERY CONNECTED) AT BATTERY TERMINALS DURING CHARGING	4A with battery discharged to 11.15V	
	OUTPUT POWER	317.4W	
	AVERAGE EFFICIENCY WITH BATTERY BACKUP	> 86 % (Load:19A / Batt:4A)	> 88 % (Load:19A / Batt:4A)
	AVERAGE EFFICIENCY WITHOUT BATTERY BACKUP (AS POWER SUPPLY ONLY)	> 87.5 % (Load : 23A)	> 89.5 % (Load : 23A)
PWM SWITCHING FREQUENCY	75 – 150KHz		
OUTPUT RIPPLE AND NOISE	100mV peak to peak at full load	70mV peak to peak at full load	

NOTE: Specifications are subject to change without notice

Over ▶

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MODEL NO.		SEC-1223P-BBM
		Input: 115A Input: 230V
OUTPUT (CONTINUED)	OUTPUT VOLTAGE ADJUSTMENT RANGE	12.5-15 VDC
	OUTPUT VOLTAGE TOLERANCE AT NO LOAD	± 0.05 VDC
PROTECTIONS	OVERLOAD AND SHORT CIRCUIT WITHOUT A BATTERY	Hiccup Mode at 27.6A to 29A. • Auto reset when fault is removed.
	OVERLOAD AND SHORT CIRCUIT WITH A BATTERY	External 25A Battery Side / Load Side Fuses will blow
	REVERSE POLARITY CONNECTION ON THE BATTERY SIDE	External 25A Battery Side Fuse will blow
	OUTPUT OVER VOLTAGE PROTECTION	By PWM Controller (16.5±0.5 VDC)
	COOLING	Temperature controlled fan: • ON when the temperature of Secondary Heat Sink reaches 55°C ± 5°C • Off when the temp. drops to 45°C ± 5°C.
	OVER TEMPERATURE PROTECTION	The unit will shut down when the Primary Heat Sink temperature rises to 105°C ± 5°C. • Reset when temp. drops to 75°C ± 5°C
	INTERNAL AC SIDE FUSE	250V, 4.0A; Time Delay Type; 5mm x 20mm
ENVIRONMENTAL	OPERATING TEMPERATURE	At 100% Rated Power: -20 °C to +50°C: 100% rated power At 80% De-Rating: 50 ~ 60°C: Linearly de-rate from 100% power at 50°C to 80% power at 60°C.
	STORAGE TEMPERATURE	-30°C to 70°C / -22°F to 158°F
	RELATIVE HUMIDITY	Maximum 90%, Non Condensing
COMPLIANCE: SAFETY	UL SAFETY LISTED: USA	UL 62368-1,2014-12-1
	UL SAFETY LISTED: CANADA	CSA C22.2 No. 62368-1-14, 2014-12
	EUROPEAN, CE SAFETY MARKED	EN 62368-1: 2014+A11:2017
COMPLIANCE: EMC	USA	<ul style="list-style-type: none"> • FCC Part 15 Sub Part B Class B • ANSI C63.4-2014 • CISPR 22: 2008 Class B
	CANADA	<ul style="list-style-type: none"> • ICES-003 Issue 6:2016 Class B • CISPR 22:2008 Class B • CAN/CSA-CISPR 22-10 Class B • ANSI C63.4-2014
		<ul style="list-style-type: none"> • EN 55032: 2015+AC: 2016 Class B • CISPR 32: 2015 Class B • EN 61000-3-2: 2014 Class D • EN 61000-3-3:2013 • EN 55024: 2010+A1: 2015 • EN 61000-4-2:2009 • EN 61000-4-3: 2006+A1: 2008+A2: 2010 • EN 61000-4-4: 2012 • EN 61000-4-5: 2014 • EN 61000-4-6: 2014+AC: 2015 • EN 61000-4-8: 2010 • EN 61000-4-11: 2004
COMPLIANCE: RoHS2	FOR EUROPEAN CE MARK	2011/65/EU (RoHS2)
DIMENSIONS / WEIGHT	DIMENSIONS (W X D X H)	185 x 240.5 x 57.8mm / 7.28 x 9.47 x 2.28 in
	WEIGHT	1.81 kg / 4 lb

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12001-SEC-1223P-BBM-0824