

SMPS | 4000

Switch Mode Power Supply



POWERFUL TECHNOLOGY



The SMPS 4000 is a battery charger and rectifier for stand-alone use, or for working in parallel, as part of a power rack system controlled by the AEON Gold alarm module. The units can also be connected in parallel, without the alarm module.

Switch mode technology with soft switching and high switching frequency is used to minimise volume and weight, and to obtain fast output voltage regulation. The module accepts large variations on the input voltage and draws sinusoidal current with a soft start power-up. When working in parallel, the rectifiers provide active current sharing. The SMPS 4000 is available in 24VDC, 48VDC and 60VDC. Design life > 15 years.



SMPS 4000

SPECIFICATIONS

INPUT

Voltage	230 VAC nominal, 100-275 VAC range. 100-185 VAC with linear power increase from 2 KW to 4 KW
High Voltage	275-300 VAC. Full power output but with reduced power factor
Over Voltage Disconnect	> 300 VAC
Frequency	45 to 66 Hz
Maximum Current	24 Amps at 185 VAC
Power Factor	>0.99 at 50% load or more
THD	< 8%
Protection	Soft start Over voltage disconnect Surge protection

OUTPUT

Voltage	24 VDC, 48 VDC or 60VDC
Output Power	24 VDC/ 3350 W, 48 VDC/ 4000 W, 60 VDC/ 4000 W
Maximum Current	125 Amps for 24 VDC, 85 Amps for 48 VDC or 70 Amps for 60 VDC
Current Share	±2.5% of full load current
Static Voltage Regulation	±0.5% from 0 to full load
Dynamic Voltage Regulation	±1.0% for 10-90% or 90- 10% load variation
Hold Up Time	> 10 ms
Ripple and Noise	<100 mV peak to peak, 30 MHz bandwidth <2 mV rms psophometric
Protection	Output fuse Short circuit proof Overheating protection Outpower derating

OTHER SPECIFICATIONS

Efficiency	>91%
Isolation	3.0 KVAC – input and output 1.5 KVAC – input earth 1.0 KVDC – output earth
Metering	Output Voltage Output Current Mains Voltage Power Limit Internal Temperature Rectifier Address Software Version
Alarms	Module Failure Low Input voltage High Input voltage High Output voltage Over Temperature Communication Failure Output fuse Failure
LED indicators	Power: green LED Alarm: red LED Communication: Yellow LED
Operating Temp	-10 to 55 °C (+14 to +131°F), +40 to 55 °C(+104 to +131°F): Temperature dependent power limiting may occur
Storage Temp	-25 to +85 °C (-13 to +185°F)
Cooling	Speed controlled fans
MTBF	131 400 hours
Humidity	5% to 95% RH non-condensing
Dimensions	80 x 450 x 264mm (wxdxh) (3 x 18 x 10") Total depth with connector and front handle, 490 mm (19.3")
Weight	7.5 kg (16.5lbs)

APPLICABLE STANDARDS

Electrical safety	EN 60950, UL 60950
EMC	EN 50081-1 (emission), EN 50082-2 (immunity)
Harmonics	IEC 1000-3-2
Environment	ETSI EN 300 019-1-3 ETSI EN 300 019-2-4

ORDERING INFORMATION

Part no.	Description
241240.020	SMPS 4000 230 VAC/24V
241240.000	SMPS 4000 230 VAC/48V
241240.040	SMPS 4000 230 VAC/60V

24124020.DS3 v.03

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