

SMPS 200

Switch Mode Power Supply



POWERFUL TECHNOLOGY

The SMPS 200 is a rectifier and battery charger for parallel operation with redundancy as part of a power rack system controlled by the AL 175 alarm module.

Switch mode technology with 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 200 offers features like:

- "Hot" plug in facilitating installation and service
- Applications as a power supply or battery charger
- 230 VAC input and 48 VDC output
- Parallel operation to meet power requirements and / or redundancy
- Compliant with International Standards

The rectifier provides 200 W output power (4 Amps at 48 VDC) at 230 VAC nominal output voltage.

The SMPS 200 supports the following control functions:

- Remote shutdown input
- Remote output voltage adjust for temperature compensation, boost charging and battery testing
- Current sharing bus for increased reliability in parallel operation



SMPS 200

SPECIFICATION

INPUT

Voltage	230 VAC \pm 20 % single phase
Frequency	45 to 65 Hz
Power Factor	0.7 typical
Protection	5 Amp Fuse, Varistor

OUTPUT

Voltage	48 V Nominal Adjustable between 45 to 58 V
Output Power	200 W
Maximum Current	3.8 Amps at 53.5 V
Current Share	\pm 5% of full load current
Static Voltage Regulation	\pm 0.5% for full load and input variation between 185-265VAC
Dynamic Voltage Regulation	\pm 1.0% for 10 - 90% or 90 - 10% load variation. Recovery time < 10mS
Hold Up Time	> 10 mS at 53.5 V full load
Ripple and Noise	< 100 mV peak to peak, 30MHz bandwidth <2 mV rms psophometric (CCITT weighted)

OTHER SPECIFICATIONS

Efficiency	>88%
Isolation	3.0 KVAC - input - output 1.5 KVAC - input - earth 1.0 KVDC - output - earth
Protection	Output power limiting Non-destructive short circuit protection High output voltage shutdown
Volt Free Alarm	Common output operated under one of the following conditions: Module failure, Low input voltage, High output voltage shut down
Voltage Adjustment	Via central monitoring unit (analogue input- AL 175 NT)
LED Indicators	Green - Unit healthy
Operating Temp	-10 to + 55 °C (14 to 131 °F)
Storage Temp	-25 to +85 °C (-93 to 185 °F)
Cooling	Convection
MTBF	700 000 h
Humidity	5% to 95% RH non-condensing
Dimensions	35.5 (7TE) x 128.4(3U) x 220 mm (wxhxd) (1.4 x 5 x 8.7")
Weight	<1.5 Kg (<3.3lb)
Housing	IP20

APPLICABLE STANDARDS

EMC	EN 50081-1, ETS 300 386 -2 (emission) EN 50082-2, ETS 300 386 - 2 (immunity)
Safety	IEC 950/ EN 60950
Harmonics	EN 61000-3-2

Specifications are subject to change without notice.

ORDERING INFORMATION

Part no.	Description	Input	Output
241110.220	SMPS 200 230/48V/4A	230 VAC	48 VDC

241110.220.DS3 v.01



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Location

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