

SMc2200

Modular 2200 Watt rectifier designed for the Telecom and Datacom applications

**Rating from a single rectifier:
41A output (48Vdc operation)**

Key features

- Convection cooled unit for low maintenance;
- High reliability;
- High power density (202W/l, 6U high);
- Wide operating input voltage range (180 to 285Vac, 300Vac withstand voltage);
- Wide operating temperature range -10°C to +70°C with automatic self protection;
- Reliable operation due to its self-protection (input, output, temperature, current) and high MTBF;
- Sine wave input (PFC) and high efficiency (92%) to reduce operation costs;
- Easy to operate: compact, light, hot pluggable, clear indications by LED, adjustment free;
- Control & alarm functions for remote management;
- Float temperature compensation and voltage control input for optimum battery charging via system controller - increases battery life;
- CE marked.

For use with controllers:

ACM1D, NRC50

For use in systems:

MTP2200C, MTP2200HP



SPECIFICATION

Input	
Nominal input supply lines	208, 220, 230 or 240Vac without adjustment
Input voltage range	180V – 285Vac, 300Vac Withstand voltage
Nominal current	10.3A at 230Vac
Nominal frequency	50 / 60Hz
Number of phases	Single phase
Power factor	0.99
Total harmonic distortion (THD)	Meets EN61000-3-2
Inrush current	Less than nominal input current

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Output	
Nominal voltage	48Vdc
Output voltage control range	40 – 60Vdc
Maximum power	2235W
Maximum current	41A
Current sharing	± 5%
Efficiency	92%
Line & load regulation	< 0.4%
Ripple and noise	< 2mV rms weighted, <20mV rms unweighted, <100mV peak to peak (30MHz Bandwidth)
Transient response	5% for load variation from 10% to 90% or 90% to 10% recovery to normal regulation limits in 10ms
Protection	
Input protection	Hot pluggable, inrush protection, soft-start, fuses on phase and neutral, surge protection devices The rectifier shuts down for input less than 170Vac or greater than 290Vac. In both cases the rectifier will automatically re-start
Output protection	Hot pluggable, electronic short circuit protection, output protection fuse
Output overvoltage	DC overvoltage shutdown
Thermal protection	Automatic shutdown on thermal overload with automatic re-start when acceptable temperatures are re-established
Alarms & indicators	
Alarms	Input/AC present, rectifier in current limit, DC overvoltage shutdown, output voltage present: via opto-coupler Rectifier fail via relay
Front panel indicators	Amber LED : Input/AC present Green LED 1 : DC output OK Green LED 2 : Output current above minimum value Red LED 1 : Rectifier in current limit Red LED 2 : DC over-voltage shutdown
Mechanical specification	
Dimensions	265mm (6U) H, 107mm (21TE) W, 443mm D (minimum cabinet depth: 600mm)
Weight	9.8kg
Ingress protection	IP20
Mounting	Vertical 6U, 4 rectifiers across 19" or ETSI rack
Connections	Hot-pluggable with rear connections
Environmental	
Cooling	Natural convection
Operating temperature	-10°C to +70°C, full power up to +50°C, apply de-rating criteria between +50°C and +70°C
Storage temperature	-40°C +80°C
Humidity	10 to 95% RH non condensing
Acoustic noise	< 35dB(A)
Standards	
Safety	EN60950 – IEC 60950
EMC	Emission: EN55022 Class B – EN61000-3-2/3-3 – EN61000-6-3/6-4 Immunity: EN61000-6-1/6-2 – ANSI C62.41
Telecom networks	EN300386 – EN300132-2
Environment	EN300019 (Transportation, storage and operation) ROHS Directive on Restriction Of use of certain Hazardous Substances WEEE Directive on Waste Electrical and Electronic Equipment
Acoustic noise	ETS 300753
Approvals	CE
Available Configurations	
Product reference	SMc2200-50-40