

SM270

270 Watt rectifier designed for small Telecom and Datacom applications

Rating: 6A output from a single rectifier (48Vdc operation)

Key features

- Convection cooled unit for low maintenance;
- High reliability;
- High power density (123W/l);
- Wide input voltage;
- Wide operating temperature range -25°C to + 60°C with automatic self protection;
- Reliable operation due to its self-protection (input, output, temperature, current) and high MTBF;
- Easy to operate: compact, light, hot pluggable, clear indications by LED, adjustment free;
- Float temperature compensation and voltage control input for optimum battery charging via system controller - increases battery life;
- CE marked.

For use with controller:

ACM1D

For use in system:

MPS270



SPECIFICATION

Input	
Nominal input supply lines	230,240 Vac
Input voltage range	150-287 Vac (with power de-rating between 150 and 184Vac)
Nominal current	1.8 A at 230 Vac
Nominal frequency	50-60 Hz
Number of phases	Single phase
Power factor	0.75
Total harmonic distortion (THD)	Meets EN61000-3-2
Inrush current	<40A

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Output	
Nominal voltage	48 Vdc
Output voltage control range	42V-57 Vdc
Maximum power	275 W
Maximum current	6A
Current sharing	± 10%
Efficiency	86%
Line & load regulation	< 1%
Ripple and noise	< 2 mV rms weighted , < 20 mV rms un weighted, 250 mV peak to peak (30 MHz bandwidth)
Transient response	5% for load variations from 10% to 90% or 90% to 10% recovery to normal regulation limits in 5ms
Protection	
Input protection	Hot pluggable, fuse on neutral, surge protection devices, the rectifier shuts down for input less than 150 Vac or greater than 275Vac; in the case of low voltage shutdown the rectifier will automatically re-start
Output protection	Hot pluggable, electronic short circuit protection, output protection fuse
Output overvoltage protection	DC overvoltage shutdown
Thermal protection	Automatic shutdown on thermal overload with automatic re-start when acceptable temperature are re-established
Alarms & indicators	
Alarms	Mains fail, rectifier fail, control loop fail/rectifier in fall back operation, DC overvoltage shutdown, output voltage present
Front panel Indicators	Green LED: Rectifier output "OK"
Mechanical specification	
Dimensions	128.8mm (3U) H, 75.6mm (15 TE) W, 225mm D (minimum cabinet depth: 300mm)
Weight	1.6 kg
Ingress protection	IP20
Mounting	5 rectifiers across 19" sub-rack or ETSI rack
Connections	Hot pluggable with rear connections
Environmental	
Cooling	Natural convection
Operating temperature	-25°C to +60°C at full power
Storage temperature	-40°C to + 85°C
Humidity	20% to 95% RH non-condensing
Acoustic noise	40dB(A)
Standards	
Safety	EN60950-1
EMC	Emission: EN 55022 Class B – EN61000-3.2/3.3 – EN61000-6.3/6.4 Immunity: EN61000-6.1/6.2
Telecom networks	EN300 386 – EN300132-2
Environment	EN300 019 (Transportation, storage and operation)
Acoustic noise	ETS 300753
Approvals	CE
Available Configurations	
Product reference	SM270-48-5