

RM848 800W 48V DC Modular Rectifier

Efficient and reliable, these modular rack mount rectifiers allow for easy paralleling of modules to provide redundancy or higher power outputs. Designed for use in modern telecommunications networks these rectifiers offer unrivalled power densities.

The unique design allows for mounting three rectifiers plus a controller and DC distribution in a 1U x 19" rack space.

"Plug and play" installation allows quick and easy installation and system expansion. These robust, reliable rectifiers are forced cooled by a speed controlled and monitored high reliability fan.

- Forced cooled.
- Thermally protected.
- Power factor corrected.
- Input/output voltage and current protected.
- Serial alarm and control interface.
- Microprocessor controlled.



Specifications



AC Input	
Nominal:	230V
Voltage Range:	90-300V (reduced power below 175V)
Frequency Range:	45-65 Hz
Power Factor:	>0.99
Efficiency:	>92% (>50% output power)
Input Fuses:	HRC fuses in phase and neutral
Maximum Input Current:	5.5A
Protection:	
Input Voltage:	Auto shutdown, auto restart when correct voltage restored
Input Inrush:	<2x maximum input current
DC Output	
Output Ratings:	Constant power output from 54V to 58V
Nominal Voltage:	48V
Rated Voltage:	58V
Voltage Range:	43-60V
Maximum Current:	16.6A
Regulation:	
Line:	±0.1%
Load:	±0.5% (no load to full load)
Hold-up Time:	>15ms for 20% output voltage drop
Start-up Time:	Start up delay 1 second. (varies with AC supply voltage) Walk-in delay 6 seconds at full output. (varies with DC output voltage)
Protection:	
Current Limit:	Adjustable to 50-100% of maximum rated current
Over Temperature:	Automatic current turndown, backup shutdown protection
Polarity Reversal:	Output fuse with crowbar diode
Over voltage:	Adjustable limit
Noise: (under nominal conditions)	
Ripple <100Hz:	<1mV rms unweighted
Voice band 100Hz-5KHz:	<2mV rms psophometric
Wide band 5kHz-1MHz:	<5mV rms unweighted
Peak to Peak 0-20MHz:	<50mV peak to peak
Isolation:	
Input to Output:	4000V DC
Input to Chassis:	3500V DC (VDR to chassis removed)
Output to Chassis:	2100V DC
Environmental Requirements	
Ambient Temperature:	
Nominal:	25+/-5°C
Range:	-20°C to +70°C (maximum output power is derated above +50°C)
Storage Temperature:	-20°C to +70°C
Humidity:	0-98% RH (non-condensing)
Altitude:	<3000m, De-rate maximum ambient temperature by 4°C per 1000m above sea level
Mechanical	
Dimensions, W, H, D:	55mm , 44mm (1U), 235mm overall (rack depth 260mm)
Weight:	800g
Shipping Dimensions W, H, D:	100mm, 80mm, 300mm
Shipping Weight:	1.0kg
Cooling:	Forced cooled
Compliances	
Safety:	EN60950
Electrostatic Discharge:	CISPR24
Radiated Radio Frequency:	CISPR22
AC Harmonics:	EN61000-3-2
AC Flicker and Fluctuation:	EN61000-3-3
Other:	CE & RoHS compliant