

## RM3060/48 3kW 60/48V 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 nine rectifiers in a 5U x 19" rack space or two rectifiers 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 two speed controlled and monitored high reliability fans.

- 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% (>45% output power)	
Input Fuses:	HRC fuses in phase and neutral	
Maximum Input Current:	19A	
Protection:		
Input Voltage:	Auto shutdown, auto restart when correct voltage restored	
Input Inrush:	<2x maximum input current	
DC Output - Software Switchable	60V	48V
Output Ratings:	Constant power output from 60V to 74V	Current limited to 50A
Nominal Voltage:	60V	48V
Rated Voltage:	68V	58V
Voltage Range:	52-74V	43-60V
Maximum Current:	50A	50A
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:	<1mV rms psophometric	
Wide band 5kHz-1MHz:	<5mV rms unweighted	
Peak to Peak 0-20MHz:	<50mV peak to peak	
Isolation:		
Input to Output:	3000V AC	
Input to Chassis:	2500V AC	
	(VDR to chassis removed)	
Output to Chassis:	1500V AC	
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:	5-95% RH (non-condensing)	
Altitude:	<2500m, De-rate maximum ambient temperature by 4°C per 1000m above sea level	
Mechanical		
Dimensions, W, H, D:	45.4mm (9E), 217.5mm (5U), 323mm overall (rack depth 280mm)	
Weight:	2.5kg	
Shipping Dimensions W, H, D:	340mm, 230mm, 52mm	
Shipping Weight:	2.65kg	
Cooling:	Forced cooled, using dual temperature controlled high reliability fans	
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	