

# **RM2048XE 2.0kW 48V DC MODULAR RECTIFIERS**



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.

These rectifiers are able to be configured horizontally or vertically to provide up to 8.0kW in a 1RU 19" shelf or alternatively, 18.0kW in a 3RU shelf. Modules are scalable to a maximum output of 252.0kW.

"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.

Modules are New Zealand made to guarantee design, manufacture and process integrity. Our robust proven conversion topology utilises only highest specification components - unfortunately something rarely offered by others.

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

**AC INPUT**

Nominal Input Voltage:	230V AC	
Input Voltage Range:	90-300V AC (reduced power below 175V AC)	
Frequency Range:	45-65Hz	
Power Factor:	>0.99	
Peak Efficiency:	>94.0%	
Input Fuses:	HRC fuses in phase and neutral	
Maximum Input Current:	12.0A	
Protection:	Input Voltage: Input Inrush:	Auto shutdown, auto restart when correct voltage restored <2x maximum input current

**DC OUTPUT**

Nominal Output Voltage:	48V DC	
Output Voltage Range:	43-58V DC	
Maximum Output Current:	41.7A	
Regulation:	Line: Load:	±0.1% ±0.5% (no load to full load)
Hold-up Time:	>10ms for 20% output voltage drop	
Start-up Time:	Start-up Delay: Walk-in Delay:	1 second depending on load and output voltage 6 seconds depending on load and output voltage
Protection:	Current Limit: Over Temperature: Polarity Reversal: Over Voltage:	Adjustable to 50-100% of maximum rated current Auto current turndown, backup shutdown Output fuse in positive with crowbar diode Adjustable limit
Noise:	Ripple <100Hz: Peak to Peak 0-20MHz:	<10mV rms unweighted <50mV peak to peak
Isolation:	Input to Output: Input to Chassis: Output to Chassis:	4000V DC 3500V DC (VDR to chassis removed) 2100V DC

**ENVIRONMENTAL REQUIREMENTS**

Ambient Temperature:	-20°C to +70°C (maximum output power is derated above +55°C)
Storage Temperature:	-30°C to +85°C
Humidity:	5-95% RH (non condensing)
Altitude:	<2,500m at full power

**MECHANICAL**

Dimensions W, H, D:	111.5mm, 44.45mm (1U), 282.0mm overall (rack depth 260.0mm)
Weight:	1.50kg
Shipping Dimensions W, H, D:	52.0mm, 120.0mm, 335.0mm
Shipping Weight:	1.60kg
Cooling:	Force cooled (front to back airflow)

**COMPLIANCES**

Safety:	EN60950
Electrostatic Discharge:	CISPR24
Radiated Radio Frequency:	CISPR22
AC Harmonics:	EN61000-3-2
AC Flicker & Fluctuation:	EN61000-3-3
Other:	CE & RoHS compliant

