

RM2048/24 2.0kW 48V DC/1.0kW 24V 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. Software selectable output voltage modes allow modules to be used in either 48V or 24V DC systems.

"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.**



SPECIFICATIONS

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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:	92.0%
Input Fuses:	HRC fuses in phase and neutral
Maximum Input Current:	13.0A
Protection:	Input Voltage: Input Inrush:
	Auto shutdown, auto restart when correct voltage restored <2x maximum input current

DC OUTPUT

	48V Mode	24V Mode
Nominal Output Voltage:	48V DC	24V DC
Output Voltage Range:	43-60V DC	21-30V DC
Maximum Output Current:	41.7A	41.7A
Regulation:	Line: Load:	±0.1% ±0.5% (no load to full load)
Hold-up Time:	>15ms 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:	<1mV 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 +50°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, 325.0mm
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

