

RM2048HE 2.0kW 48V DC MODULAR RECTIFIER



~ WORLD LEADING ~
**EFFICIENCY &
RELIABILITY**



Avoid performance compromises, secure the industry's best to reduce your OPEX and CO₂ emissions today.

With an efficiency up to 96.5%, the RM2048HE High Efficiency Rectifier Module provides considerable energy savings and ROI benefits.

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.

Designed for use in modern telecommunications networks, the RM2048HE offers unrivalled reliability and a power density that maximises the effective use of rack space.

These Compact series 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.

An expansive portfolio of Compact systems provides a wide variety of power, voltage and distribution configurations. This ensures solutions are highly flexible, so they can be tailored to effectively meet any range of communications applications.

- **Highest efficiency conversion**
reduces heat and energy losses by over 50%
- **Lowers OPEX by up to 80%**
- **"Hot plug/swap" modular architecture for quick and easy system integration/expansion.**
- **Force air cooled by a temperature controlled, high reliability and monitored fan.**
- **Attractive profile**



SPECIFICATIONS

AC INPUT

Nominal Input Voltage:	230V AC	
Input Voltage Range:	85-300V AC (175-275V AC not derating output power)	
Frequency Range:	45-65Hz	
Power Factor:	>0.99	
Peak Efficiency:	96.5%	
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:	43-60V DC	
Maximum Output Current:	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:	<2mV rms unweighted <100mV 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, 44.0mm (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
Immunity:	CISPR24
Emissions:	CISPR22
AC Harmonics:	EN61000-3-2
AC Flicker & Fluctuation:	EN61000-3-3
Other:	CE & RoHS compliant

