RM2048*XE* 2.0KW 48V DC MODULAR RECTIFIER

With efficiency greater than 94%, the RM2048XE extended efficiency rectifier module gives considerable energy savings when compared to traditional telecom rectifiers of around 91%. Meaning a cost effective solution when weighing up CAPEX versus OPEX.

These intelligent modules can be easily paralleled for redundancy and higher current outputs. Designed for use in modern telecommunications networks they offer unrivalled power densities and a form factor that allows for the most efficient use of rack space.

“Plug and Play” installation and full “Hot Swap” capability allows for quick and easy system expansion by simply adding modules. Robust and reliable these rectifiers are forced air cooled by a temperature controlled, high reliability, monitored fan.

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

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SMART
power design

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SPECIFICATIONS

AC Input	
Nominal:	230V
Voltage Range:	90-300V (reduced power below 175V)
Frequency Range:	45-65 Hz
Power Factor:	>0.99
Efficiency:	>94% (from 30-95% output power)
Input Fuses:	HRC fuses in phase and neutral
Maximum Input Current:	12A
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 48V to 58V
Nominal Voltage:	48V
Rated Voltage:	58V
Voltage Range:	43-58V
Maximum Current:	41.7A
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:	<100mV 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:	-30°C to +70°C (maximum output power is derated above +50°C)
Storage Temperature:	-30°C to +70°C
Humidity:	5-98% RH (non-condensing)
Altitude:	<2500m, De-rate maximum ambient temperature by 4°C per 1000m above sea level
Mechanical	
Dimensions, W, H, D:	111.5mm , 44mm (1U), 282mm overall (rack depth 260mm)
Weight:	1.5kg
Shipping Dimensions W, H, D:	120mm, 52mm, 325mm
Shipping Weight:	1.6kg
Cooling:	Forced cooled
Compliances	
Electrical Safety:	EN 60950
RF Emissions:	CISPR 22 Class B
RF Immunity:	CISPR 24
AC Harmonics:	EN 61000-3-2
AC Flicker and Fluctuation:	EN 61000-3-3
RoHS:	2002/95/EC
Consumer Safety:	CE