

## RM30110 3.0KW 110V 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



<b>AC Input</b>	
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
<b>DC Output</b>	
<b>Output Ratings:</b>	
Constant Current:	80-110V DC (27.3A)
Constant Power:	110-155VDC (3.0kW)
Nominal Voltage:	120V
Rated Voltage:	145V
Voltage Range:	80-155V
Maximum Current:	27.3A
<b>Regulation:</b>	
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)
<b>Protection:</b>	
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
<b>Noise: (under nominal conditions)</b>	
Ripple <100Hz:	<1mV rms unweighted
Voice band 100Hz-5KHz:	<2mV rms psophometric
Wide band 5kHz-1MHz:	<5mV rms unweighted
Peak to Peak 0-20MHz:	<200mV peak to peak
<b>Isolation:</b>	
Input to Output:	4000V DC
Input to Chassis:	3500V DC (VDR to chassis removed)
Output to Chassis:	2100V DC
<b>Environmental Requirements</b>	
<b>Ambient Temperature:</b>	
Nominal:	25+/-5°C
Range:	-10°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
<b>Mechanical</b>	
Dimensions, W, H, D:	41mm, 220mm, 305mm overall
Weight:	2.8kg
Shipping Dimensions W, H, D:	52mm, 230mm, 340mm
Shipping Weight:	2.95kg
Cooling:	Forced cooled, using dual temperature controlled high reliability fans
<b>Compliances</b>	
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