

RM848 800W 48V 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 three rectifiers plus a controller and DC distribution in a $1U \times 19''$ rack space.

"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.

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











Specifications

AC Input Nominal: 230V

90-300V (reduced power below 175V) Voltage Range:

45-65 Hz Frequency Range: Power Factor: >0.99

Efficiency: >92% (>50% output power) Input Fuses: HRC fuses in phase and neutral

Maximum Input Current:

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 54V to 58V

Nominal Voltage: 48V 58V Rated Voltage: 43-60V Voltage Range: Maximum Current: 16.6A

Regulation:

Line: ±0.1%

Load: $\pm 0.5\%$ (no load to full load) >15ms for 20% output voltage drop Hold-up Time:

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:

Adjustable to 50-100% of maximum rated current Current Limit: 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: $< 1\,\text{mV}$ rms unweighted Voice band 100Hz-5KHz: <2mV rms psophometric Wide band 5kHz-1MHz: <5mV rms unweighted Peak to Peak 0-20MHz: <50mV peak to peak

Isolation:

4000V DC Input to Output: 3500V DC Input to Chassis:

(VDR to chassis removed)

Output to Chassis: 2100V DC

Environmental Requirements

Ambient Temperature:

Nominal: 25+/-5°C

-20°C to +70°C (maximum output Range:

power is derated above +50°C)

Storage Temperature: -20°C to +70°C

Humidity: 0-98% RH (non-condensing) Altitude: <3000m, De-rate maximum ambient temperature by 4°C per 1000m above sea level

Mechanical

Dimensions, W, H, D: 55mm , 44mm (1U),

235mm overall (rack depth 260mm)

800g Weight:

Shipping Dimensions W, H, D: 100mm, 80mm, 300mm

Shipping Weight: 1.0kg Cooling: Forced cooled

Compliances

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