RM648 600W 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 x 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.

enatel

SMART
power design

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SPECIFICATIONS

AC Input	
Nominal:	110V
Voltage Range:	90-300V (reduced power below 100V)
Frequency Range:	45-65 Hz
Power Factor:	>0.99
Efficiency:	>88% (>50% output power)
Input Fuses:	HRC fuses in phase and neutral.
Maximum Input Current:	5.5A
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:	43-60V
Maximum Current:	12.5A
Regulation:	
Line:	±0.1%
Load:	±0.5% (no load to full load)
Hold-up Time:	>10ms 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:	<10mV rms unweighted.
Voice band 100Hz-5KHz:	<2mV rms psophometric, tested to ETSI 300 132-2/ITU-T
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:	-20°C to +70°C (maximum output 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), 260mm overall (rack depth 245mm)
Weight:	635g
Shipping Dimensions W, H, D:	60mm, 52mm, 325mm
Shipping Weight:	800g
Cooling:	Forced cooled.
Compliances	
ETSI EN 300 386 V1.4.1 (2004-04):	Electromagnetic compatibility and radio spectrum matters (ERM); Telecommunication network equipment; Electromagnetic compatibility (EMC) requirements.
RF Emissions:	CISPR 22 Class B
EN 55022:	Radiated emission.
EN 55022:	Conducted emission, AC ports.
EN 61000-3-2:	Harmonic current emissions.
EN 61000-3-3:	Voltage fluctuations and flicker.
RF Immunity:	CISPR 24
EN 61000-4-2:	Electrostatic discharge immunity.
EN 61000-4-3:	Radiated RF electromagnetic field immunity.
EN 61000-4-4:	Electrical fast transient/burst immunity.
EN 61000-4-5:	Surge immunity, AC ports, telecom ports.
EN 61000-4-6:	Immunity to conducted disturbances induced by RF fields.
EN 61000-4-11:	Voltage dips and short interruptions immunity.
Electrical Safety:	
EN 60950-1:2006:	Complies with information technology equipment safety standards.
RoHS:	2002/95/EC
Consumer Safety:	CE