

Rectifier Module **MegaPower 1200**

Raycap's high efficiency rectifier units



Applications

The 48V/1200W rectifier module is specially designed for indoor environments, powering up electronic equipment used in wireless and fixed broadband access networks.

Features

- Wide Input Voltage
- Designed for indoor environment
- DSP control with advanced software
- Hot-swappable
- International standards compliance

Rectifier Module

MegaPower 1200

Specifications

AC input

Voltage	90Vac~290Vac (nominal 100Vac to 240Vac)
Frequency	45Hz-65Hz
Power Factor	≥0.99@220Vac/20A, ≥0.98@220Vac/10A
Input Protection	L-line fuse15A, Varistors for transient protection

DC Output

Voltage	-53.5Vdc
Output Power	1200W (176Vac~290Vac)
Maximum Current	21A
Current Sharing	5%
Dynamic Voltage Regulation	±5.0% for 10-90% or 90-10% load variation, regulation time < 200us
Load Regulation	±0.5% from 10% to 100% load
Ripple and Noise	< 200 mV peak to peak, 20 MHz bandwidth,< 2 mV rms psophometric
Output Protection	Overvoltage shutdown, Hot swapable - Inrush current limiting Fuse Short circuit proof, High temperature protection

Design Standards

Safety	IEC 60950-1
EMC	EN55022 CLASS A, IEC61000-4-2, IEC61000-4-3, IEC61000-4-4, IEC61000-4-5, IEC61000-4-6, IEC61000-4-11, IEC61000-3-2 CLASS 2
Environment	ETSI EN 300 019-2-3, RoHS compliant

Other Specifications

Efficiency	94%@220Vac@peak
Isolation	3.0 KVAC – input and output 1.5 KVAC – input earth 0.5 KVDC – output earth
Indicator LEDs	green--normal yellow--protection warning red--failure
Alarms	Low mains shutdown High temperature shutdown Rectifier Failure Output overvoltage shutdown Fan failure
Warnings	Rectifier in power derate mode Remote battery current limit activated Input voltage out of range Low voltage alarm LVD activated
Operating Temp	-40 to 55° 100% power output +55 to 65°, 50% power derated output
Storage Temp	-40 to +70°C
Cooling Fan	temperature regulated air front to back
MTBF	500000 hours
Acoustic Noise	50dB
Humidity	10%~95% no condensing
Dimensions	86x191x42mm (WxDxH)
Weight	1.0kg



Output Current Efficiency Curve

