



#### **Features**

- Power density of up to 27 W/in<sup>3</sup>
- Rugged input voltage range
- Thermal protection
- Hot-swappable
- 92.5% typical efficiency
- International standards compliance

#### **Description**

The FMP25.48 rectifier incorporates resonant technology to reduce component stresses and provide increased system reliability. The rectifier features a wide input operating voltage range to maximize power availability within demanding utility power environments.

These compact rectifiers support up to 12.5kW in a 1RU 23" shelf. A wide variety of distribution options are available to provide the maximum system flexibility for a wide range of communications applications that demand efficiency, reliability, and flexibility including wireless base stations, remote switches, and broadband access.



7.5 kW in 19", 2 RU with Controller, Load & Battery Distribution



12.5 kW in 19", 3 RU with Controller, Load & Battery Distribution



20 kW in 19", 6 RU with Controller, Load & Battery Distribution





# Input

Model	FMP25.48	
Input Voltage	Nominal: 100-240 VAC	
	Fully compliant: 85-275 VAC Permitted variation: 85-300 VAC (L-PE and N-PE <250 VAC)	
	De-rated Output: 85-180 VAC	
Input Current	<18 A	
Frequency	44 - 66 Hz	
Power Factor	>0.98 typical	
Fuse	Two 25 A fast blow (Line & Neutral)	

## Mechanical Data

Dimensions	107 x 355 x 41 mm (WxDxH)	
Weight	2.1 kg	
Cooling	Fan-cooled, speed controlled	
Insulation	4.25 kVDC primary-secondary	
	2.12 kVDC primary-ground	
	0.1 kVDC secondary-ground	
Enclosure	IP20	
Mounting	19in/23in/1U subrack up to 5 modules, or 2/3U rack including controller and load/battery distribution	

## **Output**

Output voltage	46-57.6 VDC	
Output power (48-57.6 VDC)	2500 W	
Output Current	52 A maximum	
Efficiency	92.5%	
Tolerance	Vout ± 1.0%	
Transient response	±5% at load variation 10-90% or 90-10% recovery time 20 ms	
Load sharing	<5% of nominal current	
Ripple	<250 mV p-p (BW 20 MHz)	
Psophometric	<2 mV, according to CCITT norms	

# **Standards**

Inrush Current	ETSI EN 300 132-1		
Harmonics	EN 61000-3-2		
EMC	ETSI EN 300 386 V.1.3.2 EN 61000-6-1, EN 61000-6-3 EN55024 performance criterion A EN 61000-6-2, EN 61000-6-4 EN 55022 Class B Telcordia NEBS GR1089		
Safety	CSA 60950-1-07 UL 60950-1, EN 60950-1		
Environment	Storage: ETSI EN 300 019-2-1 Transport: ETSI EN 300 019-2-2 Operation: ETSI EN 300 019-2-3 Damp Heat: IEC 60068-2-78		

## Other Technical Data

Protection	Short circuit/arcing protection, automatic current/power limiting, input/output overvoltage protection, thermal protection.		
Alarms	Fan failure Short circuit/arcing protection High temperature/output voltage Low output voltage Input voltage out of range Low fan speed (warning) Internal communication failure		
Indicators	Green LED Yellow LED Flashing Red LED	AC in range Low fan speed, High temperature Communications failure Module failure / shutdown	
Audible noise (nominal input)	<45 dBA at 25°C (50% load) <60 dBA (100% load)		
Temperature	Operating:  -40°C to +75°C up to 2000 m  Reduced spec -40°C to -20°C  Derated output power 55°C to 75°C  For 3000 m altitude derate by 5°C  Storage: -60°C to +85°C		
MTBF	>350,000 hours (without fan) at 25°C to MIL-HDBK-217F-2		

NUCLEAR AND MEDICAL APPLICATIONS - Power-One products are not designed, intended for use in, or authorized for use as critical components in life support systems, equipment used in hazardous environments, or nuclear control systems without the express written consent of the respective divisional president of Power-One, Inc.

TECHNICAL REVISIONS - The appearance of products, including safety agency certifications pictured on labels, may change depending on the date manufactured. Specifications are subject to change without notice.