Features

- High efficiency and energy saving
- > 95% typical efficiency
- Leading power density of up to 31.3 W/in^3
- Rugged input voltage range
- Thermal protection
- Hot-swappable
- International standards compliance

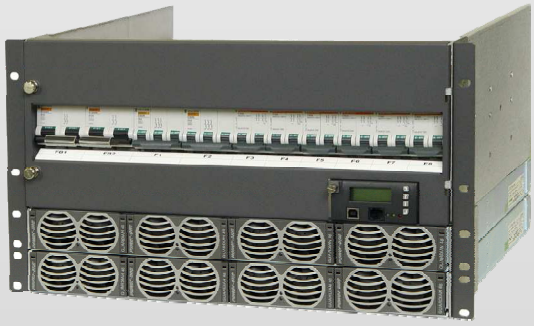
Description

The FMPe30.48 rectifier incorporates resonant technology to reduce component stresses, providing increased system reliability and a best-in-class efficiency. The rectifier features a wide input operating voltage range to maximize power availability within demanding utility power environments.

These compact rectifiers support up to 14.5 kW 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.

8.7 kW in 19”, 2 RU with Controller, Load & Battery Distribution

14.5 kW in 19”, 3 RU with Controller, Load & Battery Distribution



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

Input

Model	FMPe30.48
Input Voltage	Nominal: 100-250 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
Power Factor	>0.995 at >25% load
Fuse	Two 25 A fast blow (Line & Neutral)

Mechanical Data

Dimensions	107 x 337 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)	2900 W
Output Current	60A maximum
Efficiency	>95% typical
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

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 AC in range Yellow LED Low fan speed, High temperature Flashing Communications failure Red LED 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

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