

Description

The FMP18.48 rectifier incorporates resonance-soft-switching technology to reduce component stresses, providing increased system reliability and a best-in-class efficiency. With a wide-input operating voltage range of 84-300 VAC and linear derating of output power with input voltage, the FMP18.48 maximizes power availability in demanding utility power environments.

These compact rectifiers support up to eight 4U high rectifier units delivering up to 9 kW of power while the 23" shelf can deliver up to 18 kW of power. 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.



23-inch PPR18 Subrack

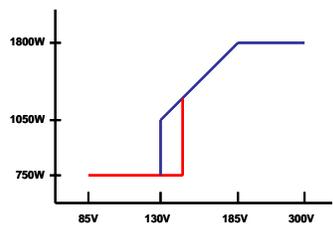
Features

- RoHS compliant for all six substances
- Leading power density of 807 W/L (13.2 W/in³)
- Rugged Input voltages of 84-300 VAC with linear power derating
- Input overvoltage disconnection
- Thermal protection
- Hot-swappable
- 93% typical efficiency
- International standards compliance

Input

Model	FMP 18.48
Input Voltage	100-240 VAC ±15% single phase (44-66 Hz) up to 300VAC (185-85 V at derated output power)
Current (max.)	<11.5 A
Soft Start	<13A /1ms
Harmonics	EN 61000-3-2 (Power factor > 0.98 typical)
Surge Immunity	EN 61000-4-5
Fuse	2 x F 12.5A (line & neutral)
Connection	FCI 51939-066
EMC	EN 61000-6-2, EN 61000-6-3, FCC Part 15 Class B

Output

Model	FMP 18.48
Output Voltage	45-58 VDC
Output Power Characteristic (50-56 VDC)	 <p>Po max = 1800 Linear derate: 1800 to 1050 W</p>
Current (max.)	38 A
Efficiency (at 40-90% load)	>92.5%, typical 93%
Tolerance	Vout ± 1.0%
Transient Response	± 5% at load variation 10-90% or 90-10% recovery time 50 ms
Load Sharing	<5% of nominal current
Ripple	<100 mV p-p (BW 30 MHz)
Psophometric	<2 mV, according to CCITT norms
Connection	FCI 51939-066
EMC	EN 61000-6-2, EN 61000-6-4

Mechanical

Dimensions (WxHxD)	51 x 177 x 280 mm (2.0 x 6.97 x 11.02 in)
Weight	2.2 kg (4.85 lb)
Cooling	Fan-cooled, speed-controlled, and alarmed
Insulation	Reinforced insulation, tested at: 4.25 kVDC primary-secondary 2.12 kVDC primary-ground 0.75 kVDC secondary-ground
Enclosure	IP20
Mounting	19in/ 4U subrack up to 8 modules 23in/ 4U subrack up to 10 modules

Other Technical Data

Safety	EN 60950-1 UL 60950-1 and IEC 60950-1 CSA C22.2 No. 60950-1	
Protection	Short circuit proof, automatic current limiting, selective shutdown of modules at excessive output voltage. Thermal protection reduces output power at environmental temperatures above maximum level. Shut down at >70 °C with an automatic restart. Input overvoltage disconnecting at >310 VAC with automatic reset at >=300 VAC.	
Alarms	High output voltage/ shutdown, Low voltage/ module failure. Each alarm has an LED indicator on the front panel.	
Indications	Green LED Yellow LED Red LED	Power ON Fan pre-warning / thermal derating. Com. failure (flashing) Module failure/ high output voltage/ shutdown
Audible Noise	<60 dBA	
Operating Temperature	-40 to +55 °C up to 2000 m -40 to +45 °C above 2000 m	
Storage Temperature	-60 to +85 °C	
Radiated EMC	EN 61000-6-2, EN 61000-6-3, FCC Part 15, Class B	
Environment	Storage: Transport: Operation: Earthquake:	ETS 300 019-2-1 ETS 300 019-2-2 ETS 300 019-2-3 GR 63 Core Zone 4

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