

## 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**

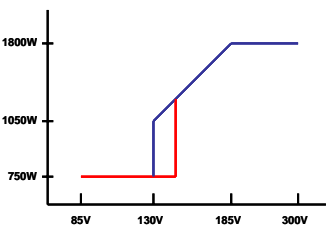
## Features

- RoHS compliant for all six substances
- Leading power density of 807 W/L (13.2 W/in<sup>3</sup>)
- 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

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

## Output

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

## Mechanical

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

## Other Technical Data

<b>Safety</b>	EN 60950-1 UL 60950-1 and IEC 60950-1 CSA C22.2 No. 60950-1	
<b>Protection</b>	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 $\geq 300$ VAC.	
<b>Alarms</b>	High output voltage/ shutdown, Low voltage/ module failure. Each alarm has an LED indicator on the front panel.	
<b>Indications</b>	Green LED  Yellow LED  Red LED	Power ON  Fan pre-warning / thermal derating. Com. failure (flashing)  Module failure/ high output voltage/ shutdown
<b>Audible Noise</b>	<60 dBA	
<b>Operating Temperature</b>	-40 to +55 °C up to 2000 m -40 to +45 °C above 2000 m	
<b>Storage Temperature</b>	-60 to +85 °C	
<b>Radiated EMC</b>	EN 61000-6-2, EN 61000-6-3, FCC Part 15, Class B	
<b>Environment</b>	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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