

## Description

The PMP 13.48 is a convection-cooled rectifier delivering superior reliability in harsh environmental conditions where fan-cooled products may not deliver the reliability required to ensure maximum network asset performance.

With leading-edge patented resonant conversion topology, the PMP13 industry-leading efficiencies of 93.5% deliver significant operating expenditure savings in the network on utility and HVAC costs. Power-One also recognizes that typical network loads operate between 20-60%; hence the PMP13 unique "flat" efficiency ensures minimal energy loss down to 15% of installed capacity

The PMP 13 is optimized for telecom applications, and is designed to work in PPS10 systems incorporating the PCS controller and various distribution options with up to 6 units per 19"/6U shelf and up to 8 units per 23"/6U shelf.



**PPS 10 3900 System Shown**

## Features

- RoHS lead free solder and lead solder exempted products are available
- 208/240 VAC input
- 48 VDC output
- Input overvoltage disconnection
- Thermal protection
- Active load sharing
- Hot swappable
- Up to 92% efficient
- International standards compliance
- Natural convection cooling
- Low weight

## Input

<b>Model</b>	<b>PMP 13.48</b>
<b>Input Voltage</b>	205-250 VAC $\pm$ 10% single phase, (44-66 Hz) (185-160 V at reduced output power)
<b>Current (max.)</b>	<6.8 A
<b>Soft Start</b>	<12 A peak max. 100 ms
<b>Harmonics</b>	EN 61000-3-2 Power Factor >0.99 at max. load
<b>Surge Immunity</b>	EN 61000-4-5
<b>Fuse</b>	T 10A
<b>Connection</b>	IEC-320/C14
<b>EMC</b>	EN 61000-6-2, EN 61000-6-3, FCC Part 15 Class B

## Output

<b>Model</b>	<b>13.48</b>
<b>Output Voltage</b>	44 - 56 VDC
<b>Power (max.)</b>	1300 W at 50-56 VDC
<b>Current (max.)</b>	28 A
<b>Efficiency (at 40-90% load)*</b>	>92%
<b>Tolerance</b>	Vout $\pm$ 1.0%
<b>Transient Response</b>	$\pm$ 5% at load variation 10-90% or 90-10%, recovery time 10 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>	DIN 41612F
<b>EMC</b>	EN 61000-6-2, EN 61000-6-4

NUCLEAR AND MEDICAL APPLICATIONS - Power-One products are not designed, intended for use in, or authorized for use as 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.

## Mechanical

<b>Dimensions (WxHxD)</b>	62 x 261 x 231 mm (2.4 x 10.3 x 9.1 in)
<b>Weight</b>	3.1 kg (6.8 lb)
<b>Cooling</b>	Natural Convection
<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>	Up to 8 modules per shelf

## Other Technical Data

<b>Safety</b>	EN 60950 UL 1950 and IEC60950 , Class 1 CSA C22-2 No. 950	
<b>Protection</b>	Short-circuit proof, automatic current limiting, selective shutdown of modules at excessive output voltage. Thermal protection reduces the output power at environmental temperatures above maximum level. Shut down at >75 °C with an automatic restart.* Input overvoltage disconnection at >275 VAC with automatic reset at >260 VAC.	
<b>Indications</b>	Green LED  Red LED  Red LED	Power ON  High output voltage/ shutdown  Low voltage/ module failure
<b>Audible Noise</b>	<35 dBA	
<b>Operating Temperature</b>	-25 to +55 °C up to 2000 m -25 to +45 °C above 2000 m	
<b>Storage Temperature</b>	-40 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:	ETS 300 019-2-1 ETS 300 019-2-2 ETS 300 019-2-3

\*Average performance for a single module.