

## 1000W Front End Power Supplies



- ◆ 1U high
- ◆ Up to 3000W (3 units) in 19" rack
- ◆ Hotswap capable (ORing diodes built in)
- ◆ Low Cost
- ◆ PoE Option

### Key Market Segments & Applications

Power for Distributed Power Architecture  
 Factory Automation  
 RF Amplifiers

## Features and Benefits

### Feature

- ◆ 1U high
- ◆ Hotswap capable
- ◆ High efficiency
- ◆ Full array of signals

### Benefit

- ◆ Utilizes less cabinet space
- ◆ Suitable for N+1 redundancy
- ◆ Less heat dissipated in system
- ◆ Easier system monitoring

## Specifications

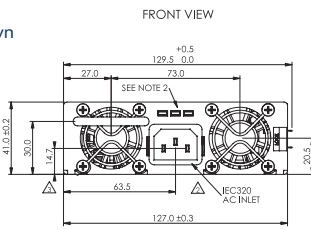
MODELS			24V Nominal	32V Nominal	48V Nominal
ITEMS					
Output Voltage Range	(1)	V	21.5 - 29V	28.8 - 38.4V	43 - 58V
Output Current		A	40A	31A	21A
Line Regulation		-		<0.4%	
Load Regulation		-		<0.8%	
Output Noise		mV	200mV	250mV	300mV
Overvoltage Protection		V	31 to 34V	41.5V to 45.5V	62 to 66V
Overcurrent Protection		-	105 - 125%, Constant Current type		
Load Sharing		-	Single wire current sharing, up to 8 units		
Remote Sense		-	Compensates for 1V on each output lead		
I <sup>2</sup> C Monitoring		-	Optional (Specify /S)		
Signals (opto isolated)		-	DC OK, AC Fail, and Overtemperature warning, high on fail		
Remote On/Off		-	On: 0 - 0.6V or short, Off: 2- 15V or open		
Auxiliary Output		-	11.2-12.5VDC 0.25A		
AC Input		-	85 - 265VAC, 47 - 63Hz <sup>2</sup> , 120-360VDC. (Derate 10% < 100VAC)		
Leakage Current		mA	<1.1mA at 230VAC input		
Inrush Current		A	<40A		
Hold up time (100VAC input)		-	20ms typical (800W loading)		
Efficiency (typ) 100/200VAC		-	83 / 86%	84 / 87%	85 / 88%
Power Factor Correction		-	EN61000-3-2 class A (20-100% load), >0.98 at full load		
Immunity		-	EN61000-4-2, -3, -4, -5, -6, -11		
EMC (conducted and radiated)		-	EN55022, level B, FCC Class B		
Operating Temperature		°C	0 to +70°C, derate 2%/°C from 50 to 60°C, 2.5%/°C from 60 to 70°C		
Storage Temperature		°C	-30 to +85°C		
Withstand Voltage		-	Input to Output 3kVAC, Input to Output 2kVAC, Output to Ground 500VAC for 1 min.		
Cooling		-	Two internal fans, airflow from front to back (variable speed)		
Humidity		-	Operating: 10 - 90% RH, Storage: 10 - 95% RH (non condensing)		
Shock & Vibration		-	Meets ETS 300 019		
Safety Agency		-	UL60950, EN60950, CE Mark		
Input / Output Connector		-	Positronic PCIB24W9M400A1 (Mating #PCIB24W9F400A1)		
Front panel indicators		-	AC OK, DC OK, DC Fail		
Size (LxWxH)		in	Stand alone: 1.61 x 5 x 11.4"; Rack: 1.72 x 19 x 13.8"		
Weight		g	2,000		
Warranty		yr	Two Years		

(1) Via Trim pin on output connector

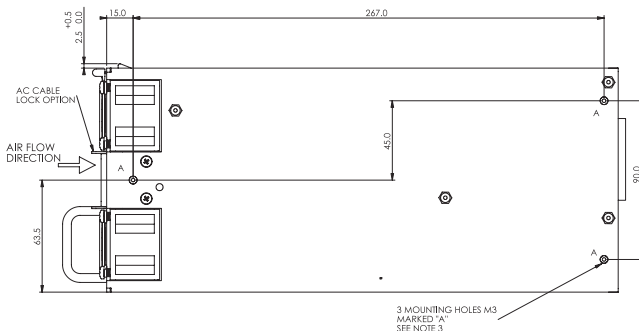
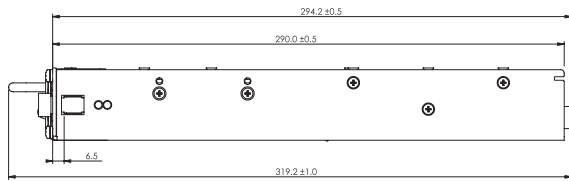
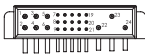
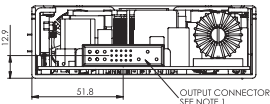
(2) 47-440Hz with reduced PFC (100-265VAC input)

# FPS1000 Outline Drawing

/P Version shown



REAR VIEW



## Other Lambda Industrial Products

PX, PS, PAQ, PAH, PAF	DC-DC Converters
TL	2U 500 to 2500W Front End AC-DC
TH	1U 750 to 2000W Front End AC-DC

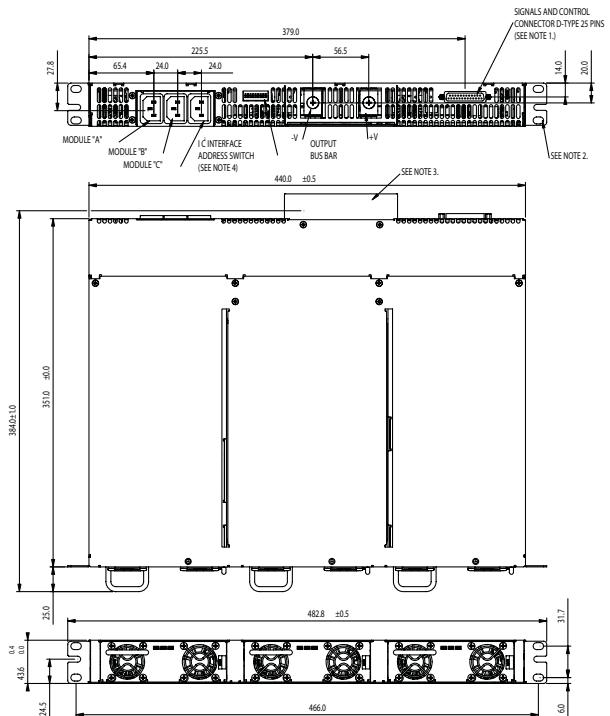
## Options

Suffix	Description
/POE*	1500VAC Output to Ground Isolation (Output noise 400mV)
* FPS100048 only.	

\* FPS100048 only.

For Additional Information, please visit  
[www.lambdapower.com/products/fps-series.htm](http://www.lambdapower.com/products/fps-series.htm)

## FPSS1U Outline Drawing



## Model Selector

Front AC Input Configuration	Output Voltage	Output Current	Maximum Power	I <sup>2</sup> C Interface
FPS100024/P	24V	40A	960W	No
FPS100024/PS	24V	40A	960W	Yes
FPS100032/P*	32V	31A	992W	No
FPS100032/PS*	32V	31A	992W	Yes
FPS100048/P	48V	21A	1008W	No
FPS100048/PS	48V	21A	1008W	Yes

FPSS1U/P	Rack (3 slot), contains two blanking panels
----------	---

Rear AC Input Configuration	Output Voltage	Output Current	Maximum Power	I <sup>2</sup> C Interface
FPS100024	24V	40A	960W	No
FPS100024/S	24V	40A	960W	Yes
FPS100032*	32V	31A	992W	No
FPS100032/S*	32V	31A	992W	Yes
FPS100048	48V	21A	1008W	No
FPS100048/S	48V	21A	1008W	Yes

FPSS1U	Rack (3 slot), contains two blanking panels
--------	---

\* Available Q1 2006, contact factory for status.

### Full Systems (3 units + rack)

Front AC Input Configuration	Output Voltage	Output Current	Maximum Power	I <sup>2</sup> C Interface
FPS300024/P	24V	120A	2880W	No
FPS300024/PS	24V	120A	2880W	Yes
FPS300048/P	48V	63A	3000W	No
FPS300048/PS	48V	63A	3000W	Yes

Front AC Input configuration. Remove /P suffix for Rear AC configuration.