

## 100W to 440W Dual Output Power Supplies

### Features

- ◆ Universal Input (85 - 265VAC)
- ◆ Power factor Corrected
- ◆ 200% Peak Power capability on 24V output
- ◆ Individual output adjustment
- ◆ 2 year warranty
- ◆ Input Transient Protected



### Key Market Segments & Applications



Specifications				
Model		ZWD100PAF-0524	ZWD150PAF-0524	ZWD225PAF-0524
Input Voltage	-	85-265VAC (47-63Hz), 120-370VDC		
Input Current (1)	A	1.3 / 0.65	1.9 / 0.97	2.81 / 1.43
Inrush Current (1)(2)	A	15 / 30		
Power Factor	-	0.99 at 100VAC, 0.95 at 200VAC, Meets EN61000-3-2		
Leakage Current	mA	0.75mA max		
Temperature Coefficient	-	<0.02%/°C		
Overcurrent Protection (3)	-	5V output: >105%, 24V output: >205%		
Overvoltage Protection (4)	V	120 - 145%		
Hold Up Time (Typ) (1)	ms	5V output: 40ms, 24V output: 20ms		
Efficiency (2)	%	79 / 81	80 / 82	81 / 83
Remote On/Off	-	On 24V output only, remove jumper to shutdown		
Line Regulation	mV	5V output: 20mV, 24V output: 96mV		
Load Regulation	mV	5V output: 40mV, 24V output: 150mV		
Ripple & Noise	mV	5V output: 120mV, 24V output: 100W, 150mV; 150/225W, 240mV		
Operating Temperature	-	(Open frame or L bracket) -10°C to +70°C, derate linearly to 0% load from 50°C to 70°C		
Operating Temperature	-	(With /A cover option) -10°C to +60°C, derate linearly to 0% load from 40°C to 60°C		
Storage Temperature	-	-30 to +85°C		
Humidity (non condensing)	-	Operating: 20 - 90%RH, Non-operating: 10 - 95% RH		
Cooling	-	Convection cooled		
Withstand Voltage	-	I/P to Gnd 2kVAC (20mA), I/P to O/P 3kVAC (20mA), O/P to Gnd 500VAC (100mA) for 1 min.		
Isolation Resistance	-	>100M at 25°C & 70%RH, Output to Ground 500VDC		
Vibration (non operating)	-	10 - 55Hz (1 minute sweep), 19.6m/s <sup>2</sup> constant X, Y, Z 1 hour		
Shock	-	< 196.1 m/s <sup>2</sup>		
Safety Agency Approvals	-	UL60950-1, CSA60950-1, EN60950-1, EN50178, CE Mark		
Conducted & Radiated EMI	-	EN55022-B, FCC Class B, VCCI-B		
Recommended EMI Filter	-	RSEL-2002W	RSEL-2003W	RSEL-2006W
Immunity	-	EN61000-4-2, -3, -4, -5, -6, -8, -11		
Weight (Typ)	g	460 (780 with cover)	530 (885 with cover)	670 (1065 with cover)
Size (WxHxD)	in	2.95 x 8.74 x 1.38	3.35 x 8.74 x 1.57	3.74 x 8.74 x 1.77
Warranty	yrs	Two Years		

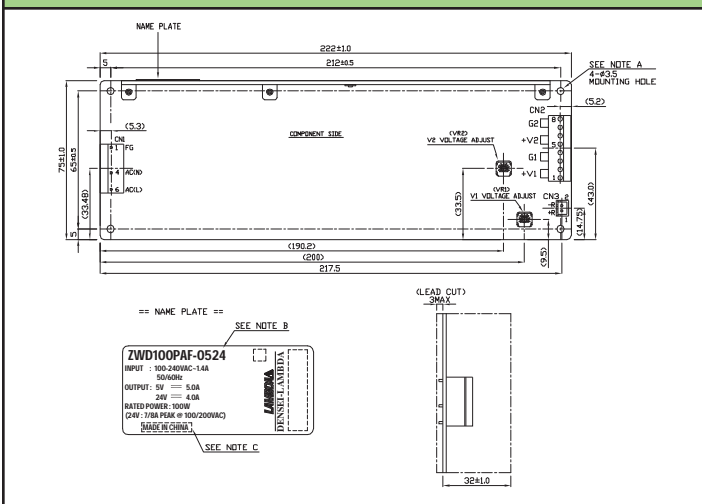
Notes: See installation manual for full specification.

- (1) 100/200VAC
- (2) 25°C ambient (cold start)
- (3) Avoid prolonged operation in overload
- (4) OVP on 24V output will shutdown 24V output only

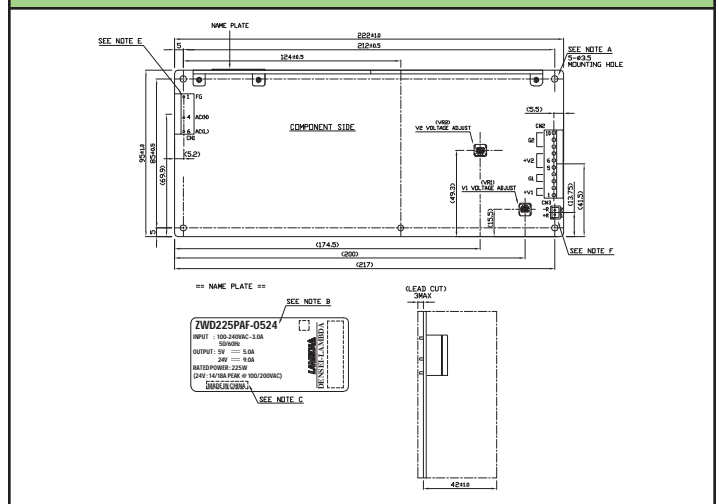
## Model Selector

Model	Output Voltage	Output Voltage Accuracy	Output Adjust Range	Max Current	Peak <sup>1,5</sup> Current	Peak <sup>1,5</sup> Power	Max Average Power	Total <sup>1,5</sup> Peak Power
ZWD100PAF-0524	5V	4.9 - 5.1V	4.5 - 5.5V	5A	-	-	100W	172 / 196W
	24V	23.52 - 24.48V	22.8 - 27.6V	4A	7 / 8A	168 / 192W	100W	172 / 196W
ZWD150PAF-0524	5V	4.9 - 5.1V	4.5 - 5.5V	5A	-	-	150W	246 / 294W
	24V	23.52 - 24.48V	22.8 - 27.6V	6A	10 / 12A	240 / 288W	150W	246 / 294W
ZWD225PAF-0524	5V	4.9 - 5.1V	4.5 - 5.5V	5A	-	-	225W	344 / 440W
	24V	23.52 - 24.48V	22.8 - 27.6V	9A	14 / 18A	336 / 432W	225W	344 / 440W

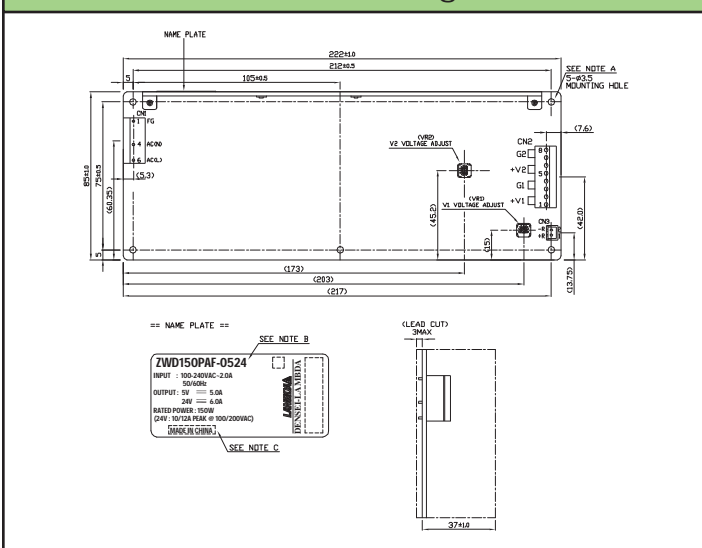
## ZWD100 Outline Drawing



## ZWD225 Outline Drawing



## ZWD150 Outline Drawing



## Options

Suffix	Description
blank	Molex Input & Output Connector
/L	L Bracket
/A	Cover & L Bracket
/J	JST Input & Output Connector
/T	Vertical Mount Screw Terminals
Preferred option combination: blank, /L, /TL, or /TA	
Example: ZWD100PAF-0524/TA	

## Other Industrial Products

ZWS, ZWSPAF	5-480W Single output, 115/230VAC input
HWS	15-1500W Single output
SWS	50-600W Single output low cost
VSB, VSC, VSP	10-288W Single output 115VAC input

For Additional Information, please visit [us.tdk-lambda.com/lp/products/zwd-paf-series.htm](http://us.tdk-lambda.com/lp/products/zwd-paf-series.htm)



## Notes:

- (5) ZWS100PAF: For <10s max, duty cycle ≤0.35
- ZWS150PAF: Up to 10A peak, <10s max, duty cycle ≤0.35; from 10-12A, <5s, duty cycle ≤0.2
- ZWS225PAF: Up to 14A peak, <10s max, duty cycle ≤0.35; from 14-18A, <5s, duty cycle ≤0.2