



## Single Output Industrial Power Supplies

- ◆ -40°C to +71°C operation
- ◆ MIL-STD-810E Vibration / Shock
- ◆ Input transient protected
- ◆ Wide range output adjustment
- ◆ Single wire current share
- ◆ Conducted EMI Class B
- ◆ 5 Year Warranty

### Key Market Segments & Applications

Factory Automation      Process Control, NC-Machining,  
Automotive, Packaging Equipment,  
Materials Handling,  
Chemical Processing, Robots

## Features and Benefits

Feature	Benefit
◆ Rugged mechanical design	◆ High reliability in harsh conditions
◆ Superior thermal design	◆ Longer life even at 71°C operation
◆ Wide range adjustment of output	◆ Reduces need for custom outputs
◆ Input voltage transient protected	◆ Reduced system filtering

## Specifications

ITEMS	MODELS	5V Output Models (-1)			12V Output Models (-2)		24V Output Models (-3)	
		LZS: 85-132 / 170-265VAC Auto select, SE: 105-140VAC (170VAC for 1min.)			LZS: 47 - 440Hz, SE: 47 - 63Hz		LZS: 220 - 380VDC	
AC Input Voltage	-							
AC Input Frequency	-							
DC Input Voltage Range	-							
Inrush Current (110 / 220VAC)	A	250W & 500W: 20 / 40A. 750W, 1000W & 1500W: 40 / 80A						
Efficiency (typical)	%	75%, (72% on 250W models)						
Ripple & Noise	-	10mV RMS, 35mV Pk-Pk		10mV RMS, 50mV Pk-Pk		10mV RMS, 100mV Pk-Pk		
Line Regulation	%	0.1% from low AC line to high AC line						
Load Regulation	%	0.1% from no load to full load						
Transient Response	-	Recovers to within 50ms, max deviation 7.5% -1 models, 5% -2 & -3 models						
Overcurrent Protection	-	~ 110% of rated current, auto recovery						
Overvoltage Protection	V	User adjustable from front panel						
Thermal Protection	-	Internal thermostat. Recycle AC to reset						
Hold Up Time (Typical)	ms	26ms (at 115VAC)						
Remote Sense	-	Compensates for a total of 1.0V cable drop						
Remote Adjust	-	Using front panel potentiometer, Resistance (1k/V), or Voltage (1V/V)						
Remote On / Off	-	TTL compatible, active high						
Signals	-	Optocoupled transistor for AC Fail, DC Good, Inverter OK						
Indicators	-	Green LED indicates output good, red LED indicates overvoltage or over temperature						
Parallel Connection	-	Single wire current share						
Operating Temperature	°C	-40~+71°C, derate as shown in model selector, 20 minute warm up period needed for <-30°C						
Storage Temperature	°C	-55 to +85°C						
Temperature Coefficient	-	0.025%/°C						
Humidity (non condensing)	%RH	5 - 95%RH						
Cooling	-	Internal fan						
Withstand Voltage	-	Input - Ground 1.5kVAC, Input - Output 3kVAC, Output - Ground 500VAC						
Vibration	-	MIL-STD-810E, Method 516.4 Proc. I, II, IV, VI						
Shock	-	MIL-STD-810E, Method 514.4, Category 1, 9						
Safety Agency Approvals	-	UL60950, CSA60950, EN60950, & CE Mark (LVD)						
Conducted & Radiated EMI	-	VDE0871 Curve B, FCC Part 15, subpart J, Class B, MIL-STD-461D, CE102						
Weight (Net / Shipping)	lbs	250: 7/9; 500: 10/12; 750: 11/14; 1000: 15.5/19.5; 1500: 22/26						
Size (WxHxD)	-	See outline drawings						
Warranty	-	5 years						

Notes: (Consult Installation Manual for detailed specifications, test methods and application notes)

## Output Ratings

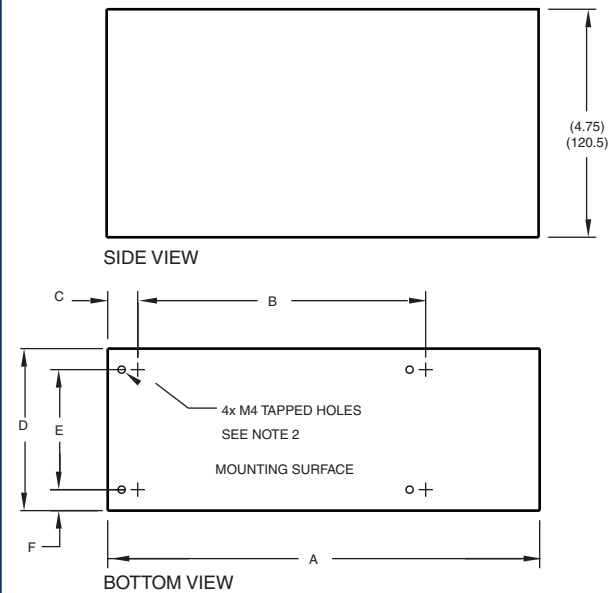
Model	Nominal Voltage (V)		Adjustment Range (V)		Maximum Current (A)			
					40°C	50°C	60°C	71°C
LZS250-1	5	4.5 - 6.3	50	45	40	30		
LZS500-1	5	4.5 - 6.3	100	90	80	60		
LZS750-1	5	4.5 - 6.3	150	135	120	90		
LZS1000-1	5	4.5 - 6.3	200	190	160	120		
LZS1500-1	5	4.5 - 6.3	300	270	240	180		
LZS250-2	12	10 - 15.75	21	18.9	16.8	12.6		
LZS500-2	12	10 - 15.75	42	37.5	33.5	27		
LZS750-2	12	10 - 15.75	63	56.5	50	37.5		
LZS1000-2	12	10 - 15.75	83	80	67	50		
LZS1500-2	12	10 - 15.75	125	112.5	100	75		
LZS250-3	24	18 - 29.4	12.5	11.3	10	7.5		
SE250-3	24	18 - 29.4	12.5	11.3	10	7.5		
LZS500-3	24	18 - 29.4	25	22.5	20	16.5		
SE500-3	24	18 - 29.4	25	22.5	20	16.5		
LZS750-3	24	18 - 29.4	37.5	33.5	30	22.5		
SE750-3	24	18 - 29.4	37.5	33.5	30	22.5		
LZS1000-3	24	18 - 29.4	50	48	40	30		
SE1000-3	24	18 - 29.4	50	48	40	30		
LZS1500-3	24	18 - 29.4	75	67.5	60	45		
SE1500-3	24	18 - 29.4	75	67.5	60	45		

## Other Lambda Industrial Products

LZSa	500W to 1500W RoHS compliant
HWS	15W to 1500W Single output
JFS	500W to 2000W Single output
DPP, DLP, DHP	15 to 960W DIN Rail single output

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

## Outline Drawings



### DIMENSIONS:

MODEL	A	B	C	D	E	F
LZS,SE250	9.00 (228.6)	6.000 (152.4)	.62 (15.8)	3.37 (85.7)	2.500 (63.5)	.43 (11.0)
LZS,SE500	10.25 (260.3)	6.500 (165.1)	.62 (15.8)	4.25 (107.9)	3.000 (76.2)	.62 (15.8)
LZS,SE750	10.37 (263.5)	7.000 (177.8)	.62 (15.8)	5.00 (127.0)	3.500 (88.9)	.62 (15.8)
LZS,SE1000	10.50 (266.7)	8.500 (215.9)	.75 (19.0)	5.62 (142.8)	3.500 (88.9)	1.06 (26.9)
LZS,SE1500	11.00 (279.4)	8.000 (203.2)	.75 (19.0)	8.00 (203.2)	3.500 (88.9)	2.12 (54.0)

### WEIGHT:

MODEL	NET LBS	SHIP LBS
LZS,SE250	7.0	9.0
LZS,SE500	10.0	12.0
LZS,SE750	11.0	14.0
LZS,SE1000	15.5	19.5
LZS,SE1500	22.0	26.0

### NOTE:

1. DIMENSIONS ARE IN INCHES EXCEPT DIMENSIONS ( ) ARE IN MM.
2. 4 x M4 TAPPED HOLES FOR CUSTOMER MTG. SCREWS MUST NOT PROTRUDE INTO POWER SUPPLY BY MORE THAN .25 (6.3).
3. CUSTOMER MUST PROVIDE CLEARANCE AROUND VENT HOLES TO ALLOW FOR AIR FLOW.