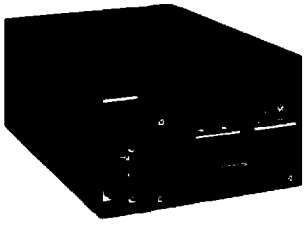
LZS/SE Series Power supplies for rugged environments



Harsh Environment

Meets Worldwide EMI Requirements

Input transient Protection

Meets Worldwide Safety Requirements

MIL-STD-810E Vibration/Shock

Auxiliary Monitoring Signals

Wide Range Output Voltage

5 Year Warranty

Single Wire Current Share

SE- Ruggized 115VAC Input (Severe Line Transients)

Lambda's LZS and SE Series single output power supplies (250W to 1500W) are ideal for industrial applications requiring reliable performance under harsh operating conditions.

Through temperature extremes, high levels of vibration, shock, and random transients on the AC input, rugged construction and advanced design of the LZS and SE Series guarantee reliable performance. And their meticulous thermal design ensures that all internal components are operating significantly below the manufacturer's rating - even when the ambient operating temperature reaches 71°C. In addition, to ensure reliability in even the most rugged environments, the LZS and SE Series meet the rigorous requirements of MIL-STD-810E Shock and Vibration. Lambda designs these performance features in at the front end - without additional costs.

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NES/DRP/JFS	Din Rail Mount	32, 28

AC Input ..... 85-132/170-265VAC auto selectable, 7-440Hz on the LZS-250, 500, 750, 1000 & 1500.
105-140VAC on the SE Series.

DC Input ..... 220-380VDC.

EMI ..... Conducted EMI conforms to FCC Part 15, Subpart J, Class B; VDE 0871 Curve B; and MIL-STD-461D, CE102.

DC Output Controls ..... A multi-turn potentiometer is provided for voltage adjustments.

Line Regulation ..... 0.1% for variations from low line to high line and high line to low line.

Load Regulation ..... 0.1% for load variations from no load to full load and full load to no load.

Ripple and Noise ..... 10mVRMS, 35mV pk-pk for -1 model.
10mVRMS, 50mV pk-pk for -2 model.
10mVRMS, 100mV pk-pk for -3 models.

Parallel Operation ..... 3% max. current balance. Current sharing is achieved through a single wire connection.

Overshoot ..... No overshoot at turn-on, turn-off or input power failure.

Overvoltage Protection .... Inverter shutdown type OV protection is standard on all models.

Overload Protection ..... Internal current limiting circuit resets automatically.

Cooling ..... Forced-air cooled via an internal fan.

Operating Temperature Range Operation from -40°C to +71°C. A 20 min. warm-up for operation below -30°C.

Storage Temperature ..... -40°C to +85°C.

Temperature Coefficient .... 0.025% per°C.

Isolation ..... Input to Output – 3000V RMS.
Output to Chassis – 500V RMS.
Input to Chassis – 1500V RMS.

Remote On/Off ..... TTL compatible, active high.

Remote Sensing ..... Internal circuitry allows for a 1.2V drop in output leads.

Resistive Programming ..... 1000 ohms/volt.

Voltage Programming ..... Volt per Volt.

Thermal Protection ..... Internal thermostat protects the power supply against fan failure or blockage. AC power must be recycled to restore operation.

Mounting ..... One mounting surface and multiple mounting positions.

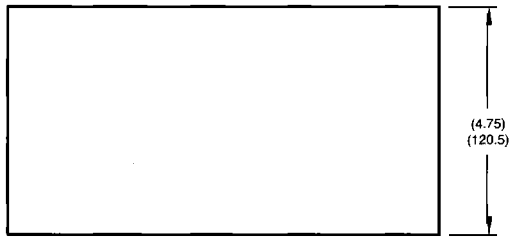
Military Specifications ..... Shock – MIL-STD-810E, Method 516.4 Proc. I, II, IV, VI
Vibration – MIL-STD-810E, Method 514.4 Category 1, 9.

Safety Agency Approval .... UL1950, CSA950, EN60950, CE Mark.

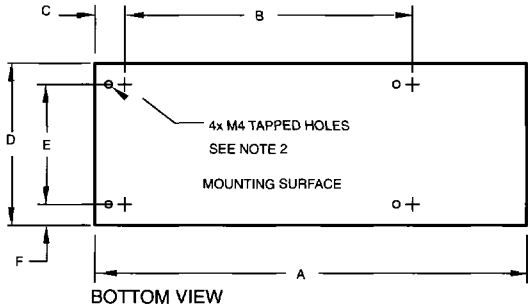
Warranty ..... 5 years.

OUTPUT	POWER (W)	MAX CURRENT AMPS AT 40°	50°	60°	71°	MODEL
5,6V (4.5-6.3)	250	50.0	45.0	40.0	30.0	**LZS-250-1**
	500	100.0	90.0	80.0	65.0	**LZS-500-1**
	750	150.0	135.0	120.0	90.0	**LZS-750-1**
	1000	200.0	190.0	160.0	120.0	**LZS-1000-1**
	1500	300.0	270.0	240.0	180.0	**LZS-1500-1**
12,15V (10-15.75)	250	21.0	18.9	16.8	12.6	**LZS-250-2**
	500	42.0	37.5	33.5	27.0	**LZS-500-2**
	750	63.0	56.5	50.0	37.5	**LZS-750-2**
	1000	83.0	80.0	67.0	50.0	**LZS-1000-2**
	1500	125.0	112.5	100.0	75.0	**LZS-1500-2**
24,28V (18-29.4)	250	12.5	11.3	10.0	7.5	**LZS-250-3**
	250	12.5	11.3	10.0	7.5	**SE-250-3**
	500	25.0	22.5	20.0	16.5	**LZS-500-3**
	500	25.0	22.5	20.0	16.5	**SE-500-3**
	750	37.5	33.5	30.0	22.5	**LZS-750-3**
	750	37.5	33.5	30.0	22.5	**SE-750-3**
	1000	50.0	48.0	40.0	30.0	**LZS-1000-3**
	1000	50.0	48.0	40.0	30.0	**SE-1000-3**
	1500	75.0	67.5	60.0	45.0	**LZS-1500-3**
	1500	75.0	67.5	60.0	45.0	**SE-1500-3**

LZS250, 500, 750, 1000, 1500
SE250, 500, 750, 1000, 1500



SIDE VIEW



BOTTOM VIEW

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)	.75 (15.8)
LZS,SE750	10.37 (263.5)	7.500 (109.5)	.62 (15.8)	5.00 (127.0)	3.500 (88.9)	.75 (15.8)
LZS,SE1000	10.50 (266.7)	6.500 (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)

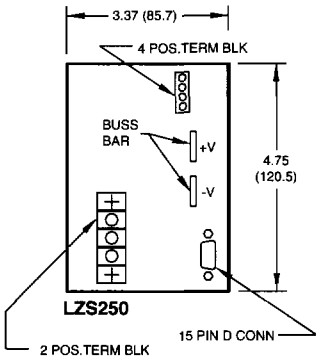
WEIGHT:

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	19.0	23.0

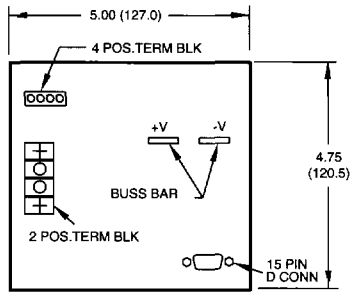
NOTE:

1. DIMENSIONS ARE IN INCHES EXCEPT DIMENSIONS ( ) ARE IN MM.
2. 4x 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.

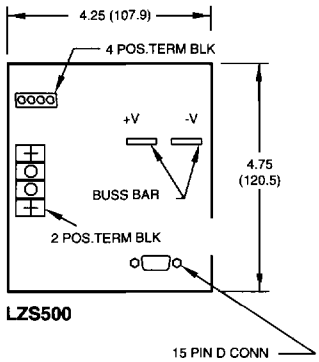
REAR VIEW LZS/SE



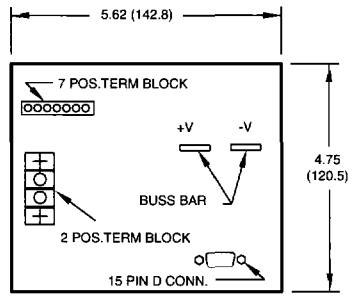
LZS250



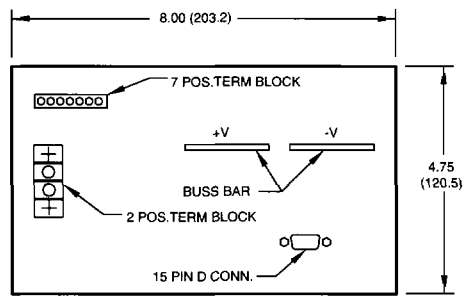
LZS750



LZS500



LZS1000



LZS1500