

Linear	Desktop
Enclosed or L Bracket	Open Frame
PCB Mount	Rack Mount Hot Swap

AC-DC Selector

Applications	# of Outputs	Output Power (W)												
		5	10	15	30	50	100	300	500	1000	1500	2500		
High Reliability Industrial (Five Year Warranty)	Single				NNS									
					HWS									
							JWS							
										LZSA				
	Dual			NND										
	Triple					JWT								
Industrial (Three Year Warranty)	Single & Multiple			HK-A (Single Output, 115VAC input)										
								NV						
					MTW									
									Vega					
											Alpha			
				LS										
Datacom Commercial (One - Two Year Warranty)	Single		KW, KPS, KM											
			ZWS, ZWSAF, ZWSPAF											
					DT									
					H									
					SC, SC120, ZP									
							SWS							
								PFE						
										FPS (1U)				
										TH (1U)				
		Multiple		KW, KM										
				LWD, LWT										
				H										
				DT										
					SC, ZP									
						ZWD, ZWQ								
Programmable	Single							ZUP						
DIN Rail Mount	Single				DSP, DPP, DLP-PU*									
							DLP							

* See website



Single Output Industrial Power Supplies

- ◆ 5 Year Warranty
- ◆ -40°C to +71°C Operation
- ◆ MIL-STD-810E Vibration / Shock
- ◆ Input transient protected
- ◆ UL508, SEMIF47, Factory Mutual (Class 1, Division 2)

RoHS

Key Market Segments & Applications

Factory Automation
Process & Controls
Harsh Environments

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

MODELS		LZSA500	LZSA1000	LZSA1500
ITEMS				
Input Voltage (47-440Hz)*	-	85 - 265VAC (1500W: see output rating below 100VAC),100-400VDC		
Inrush Current (110 / 220VAC)	A	20 / 40A	40 / 80A	
Power Factor	-	EN61000-3-2 Class A		
Efficiency (typical)	%	84%		
Ripple & Noise (Pk-Pk)	-	75mV	75mV	24V: 75mV; 48V: 150mV
Line Regulation	%	0.1%		
Load Regulation	%	0.1%		
Transient Response	-	±1% deviation, recovering to ±0.2% in <1.25ms (25% load change)		
Overcurrent Protection	-	110 - 130%		
Overvoltage Protection	V	User adjustable from front panel		
Thermal Protection	-	Internal thermostat. Recycle AC to reset		
Hold Up Time at 110VAC	ms	20ms Hold Up, 20ms Ride Through		
Remote Sense	-	Compensates for a total of 1V 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. 200kHz sync signal (Ref-sense)		
Indicators	-	Green LED indicates output good, red LED indicates overvoltage or over temperature		
Parallel Connection	-	Single wire current share		
Operating Temperature	°C	-40°to+71°C, derate linearly to 60% load from 60°C~71°C (20 min warm up period needed for <-30°C)		
Storage Temperature	°C	-40° to +85°C		
Temperature Coefficient	-	0.01%/°C		
Humidity (non condensing)	%RH	10 - 90%RH		
Cooling	-	Internal fan		
Withstand Voltage	-	Input - Ground 2,121VDC, Input - Output 4,242VDC, Output - Ground 500VDC		
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	-	UL60950-1, UL508, EN60950-1, FM 3600, 3611, 3810, & CE Mark. SEMIF47(>100VAC)		
Leakage current	uA	<500uA at 265VAC, 60Hz		
Emissions	-	EN55022/EN55011 Class B, EN61000-3-3, MIL STD 461/462D CE102		
Immunity	-	EN61000-4-2, -3, -4, -5, -6, -8, -11. IEEE C62.41 (6kV/30 Ohm, Criteria A)		
Altitude	m	3,000m operating, 12,000m non operating		
Weight	lbs	6.5	8.1	
Size (WxHxD)(w/o bus bars)	ins	4.25 x 4.75 x 10.25	5.62 x 4.75 x 10.5	
Warranty	yrs	Five Years		

Notes: (Consult Installation Manual for detailed specifications, test methods and application notes) * Reduced power factor above 63Hz

Output Ratings

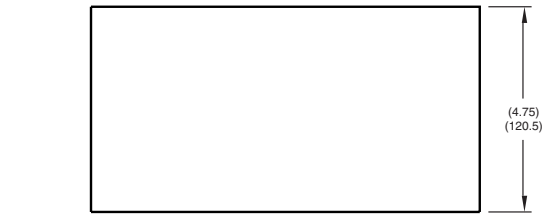
Model	Nominal Voltage (V)	Adjustment Range (V)	Maximum Current (A)	Maximum Power (W)
LZSA500-3	24	18 - 29.4	21	504
LZSA1000-2	12	10 - 15.75	84	1008
LZSA1000-3	24	18 - 29.4	42	1008
LZSA1500-3	24	18 - 29.4	63	1512 ⁽¹⁾
LZSA1500-4	48	36 - 56	31.5	1512 ⁽¹⁾

Note (1) For input voltages <100VAC derate linearly to 1200W at 85VAC
Preliminary model highlighted in green.

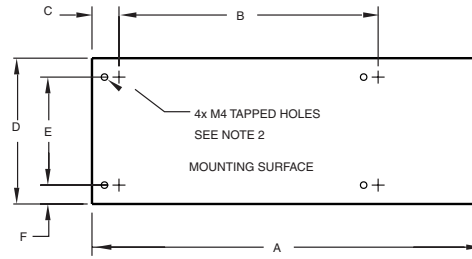
Other Lambda Industrial Products

HWS	15W to 1800W Single Output
DLP, DPP	15W to 480W Single Output
PFE	300 to 700W Power Module

Outline Drawings



SIDE VIEW



BOTTOM VIEW

DIMENSIONS:

MODEL	A	B	C	D	E	F
LZSA500	10.25 (260.3)	6.500 (165.1)	.62 (15.8)	4.25 (107.9)	3.000 (76.2)	.62 (15.8)
LZSA1000/1500	10.50 (266.7)	8.500 (215.9)	.75 (19.0)	5.62 (142.8)	3.500 (88.9)	1.06 (26.9)

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.