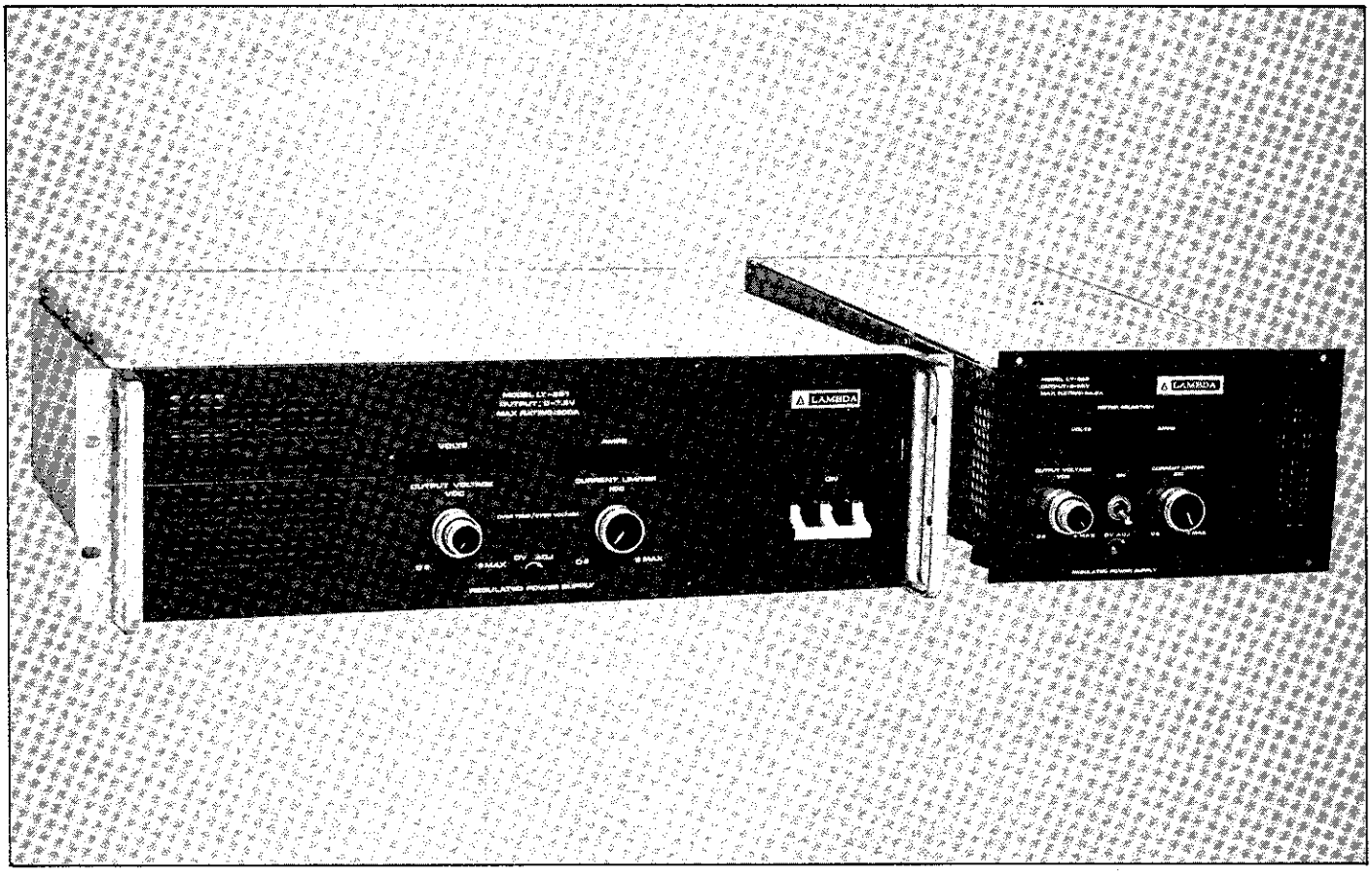
PART III—LAB, TEST EQUIPMENT AND SYSTEM POWER SUPPLIES

Lambda LT Series



Features—LT series

5-Year Guarantee

Half the size, one-third the weight of an equivalent SCR power supply.

8 models up to 60V, up to 300A.

Up to 3Kw output.

Built-in overvoltage protection on all models.

Digital meter readout.

Constant voltage/constant current.

Conducted EMI conforms to FCC 20780 Class A.

Voltage and Current Ratings

MODEL	MAX CURRENT AMPS AT AMBIENT OF 40°C	50°C	60°C	71°C	PRICE
0-7.5 VOLTS					
LT-801	150.0	135.0	115.0	89.0	$1683
LT-821	300.0	266.0	218.0	160.0	2958
0-18 VOLTS					
LT-802	70.0	61.0	52.0	40.0	1683
LT-822	150.0	133.0	109.0	80.0	2958
0-36 VOLTS					
LT-803	34.5	30.5	26.0	20.0	1683
LT-823	80.0	71.0	58.0	42.0	2958
0-60 VOLTS					
LT-804	21.5	19.0	16.2	12.5	1683
LT-824	50.0	43.0	35.0	25.0	2958

NOTE: Maximum output current applies over entire voltage range.

Specifications—LT Series

DC OUTPUT AND RATINGS

Refer to the table.

REGULATION

Constant Voltage

regulation, line . . . . .0.02% + 2mV for line variations from 187 to 242 VAC (205 to 265 VAC on "V1" option) for LT-800 series. 187 to 229 VAC (207 to 253 VAC on "V1" option) for LT-820 series.

regulation, load . . . . .0.02% + 2mV on LT-801, 802, 821, 822 0.02% + 4mV on LT-803, 804, 823, 824 for load variations from 0 to full load.

remote programming resistance . . . . . .200Ω/volt nominal.

remote programming voltage . . . . . .volt/volt.

ripple and noise . . . 10mV RMS; 50mV pp for LT-801, 821. 15mV RMS; 100mV pp for LT-802, 803, 804, 822, 823, 824.

temp. coeff. . . . . .(0.02% + 50μV)/°C.

Constant Current (current regulated line and load) Automatic Crossover

voltage range . . . . . .as shown in Table.

current range . . . . . .5% to full load current.

regulation, line . . . . .0.3% of Io(max) for line variations from 187 to 242 VAC (205 to 265 VAC on "V1" option) for LT-800 series.

0.3% of Io(max) for line variations from 187 to 229 VAC (207 to 253 VAC on "V1" option) for LT-820 series.

regulation, load . . . . .0.3% of Io(max) for load variations from 5% to rated DC voltage.

AC Input

line . . . . . .LT-800 series—187 to 242 VAC (205 to 265 VAC on "V1" option), 47-63 Hz. (Derate all ratings by 10% at 47-53 Hz)

LT-820 series—187 to 229 VAC, 3 phase ± 10% max phase imbalance, 4 wire, 47-63 Hz (207 to 253 VAC on "V1" option). (Derate 40°C ratings by 10% at 47-53 Hz).

power . . . . . .1985 watts max on LT-800 series. 4000 watts max on LT-820 series.

efficiency . . . . . .minimum 65% at maximum output voltage for LT-800 series, 70% for LT-820 series.

soft start circuit . . . . .limits in-rush current at turn-on to 200% of full load peak current.

input current . . . . . .18A RMS max on LT-800 series, 17A RMS max per phase on LT-820 series.

Ambient Operating Temperature

Continuous duty from 0°C to 71°C with appropriate deratings from 40°C to 71°C.

Storage Temperature Range

−55°C to +85°C.

Overload Protection

THERMAL

Thermostat protects unit from excessive ambient temperature as well as inadequate air velocity. AC power must be momentarily removed from unit after thermal shutdown in order to restore operation.

ELECTRICAL

External overload protection—adjustable, automatic electronic current-limiting circuit limits output current to preset value. Current-limiting settability to 105% of rated current via front panel adjust.

OVERVOLTAGE PROTECTION

Built-in, adjustable overvoltage protection standard on all sets. When pre-set voltage is exceeded, the overvoltage protector crowbars the output and removes the inverter drive. AC power must be momentarily removed from unit after overvoltage shutdown in order to restore operation.

Overvoltage Protection Adjustable Ranges

Model	Vov(Min)	Vov(Max)
LT-801/821	3.5V	10V
LT-802/822	6V	24V
LT-803/823	9V	47V
LT-804/824	12V	70V

Overvoltage/Overtemp Indicator Lamp

An overvoltage/overtemp indicator lamp will light to notify the user of the occurrence of either an overvoltage or overtemperature shutdown condition. AC power must be removed from the unit to reset the power supply and the light.

EMI

Conducted EMI conforms to FCC 20780 class A.

Cooling

Fan cooled. Forced air cooling utilizing all metal, shaded pole, ball bearing, long life fan. (No lubrication needed). Leave adequate clearance at all air intakes and exhausts.

Input and Output Connections

Heavy duty barrier strips for AC input, ground and sensing. DC output via bus bar at rear of chassis.

Meters

Digital panel meter standard on all sets. Monitors output voltage/current by means of a volt/amp selector switch on LT-800 series. Separate digital panel meters on LT-820 series allow simultaneous monitoring of output voltage and current.

CONTROLS

DC Output Controls

Coarse and fine voltage adjust and single current adjust on front panel.

Overvoltage Protection

Overvoltage trip point set by screwdriver adjust on front panel.

Power

On-off switch on front panel of LT-800 series. On-off circuit breaker on front panel of LT-820 series.

Remote Sensing

Provision is made for remote sensing to eliminate effect of power output lead resistance on DC regulation.

Accessories

Pot Covers available for all models. LRA-17 Rack Adapter available for LT-800 series. Chassis slides available for LT-820 series.

OPTIONS

AC Input

Series Model	Add Suffix	For Operation at:	Price Qty. 1-14	Price Single Model Qty. 15	Price Mixed Model Qty. 15 & up
LT-800	—V1	205-265 VAC 47-63 Hz	12%	10%	12%
LT-820	—V1	207-253 VAC 47-63 Hz	12%	10%	12%

Physical Data

LT-800 series-5 3/16 x 8 3/8 x 19 3/16.
30 lbs net. (37 lbs. ship)
LT-820 series-5 3/16 x 19 x 16 1/2.
70 lbs. net. (82 lbs. ship)

Guaranteed for 5 Years

5 year guarantee includes labor as well as parts. Guarantee applies to operation at full published specifications at end of 5 years.

PART IV—DIMENSIONAL DRAWINGS
LT SERIES POWER SUPPLIES

LT-800 SERIES

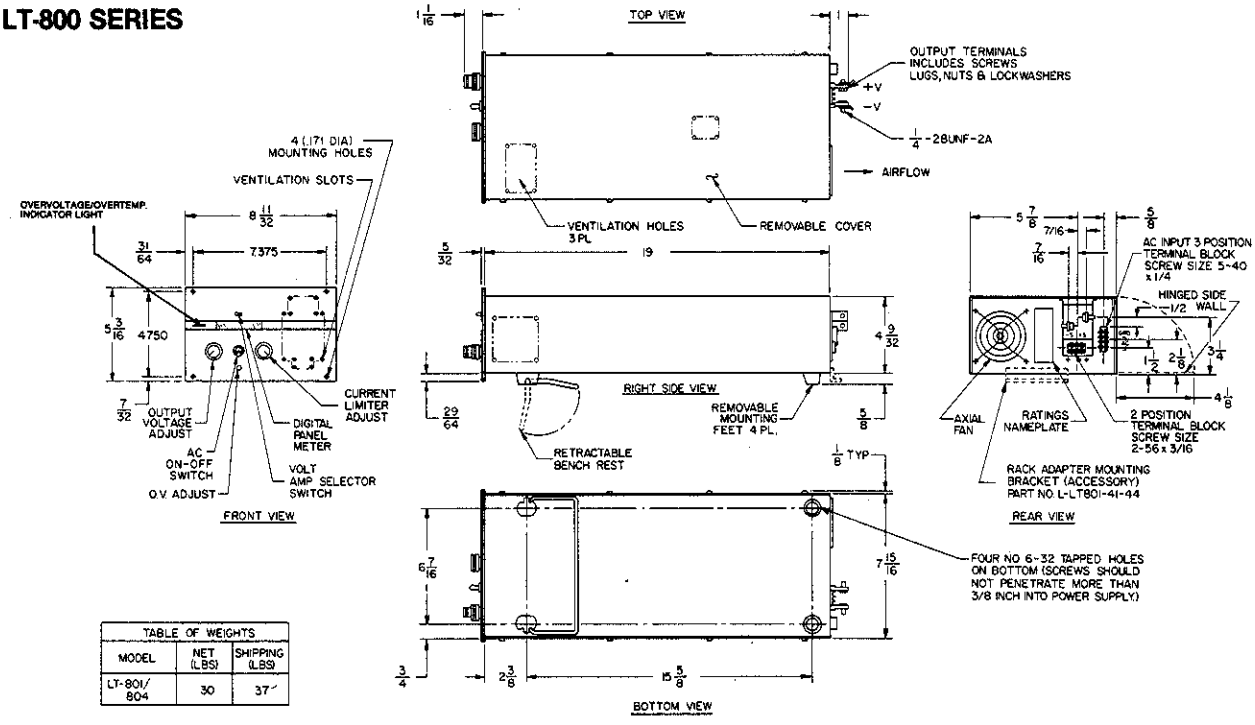


TABLE OF WEIGHTS		
MODEL	NET (LBS)	SHIPPING (LBS)
LT-801/804	30	37

LT-820 SERIES

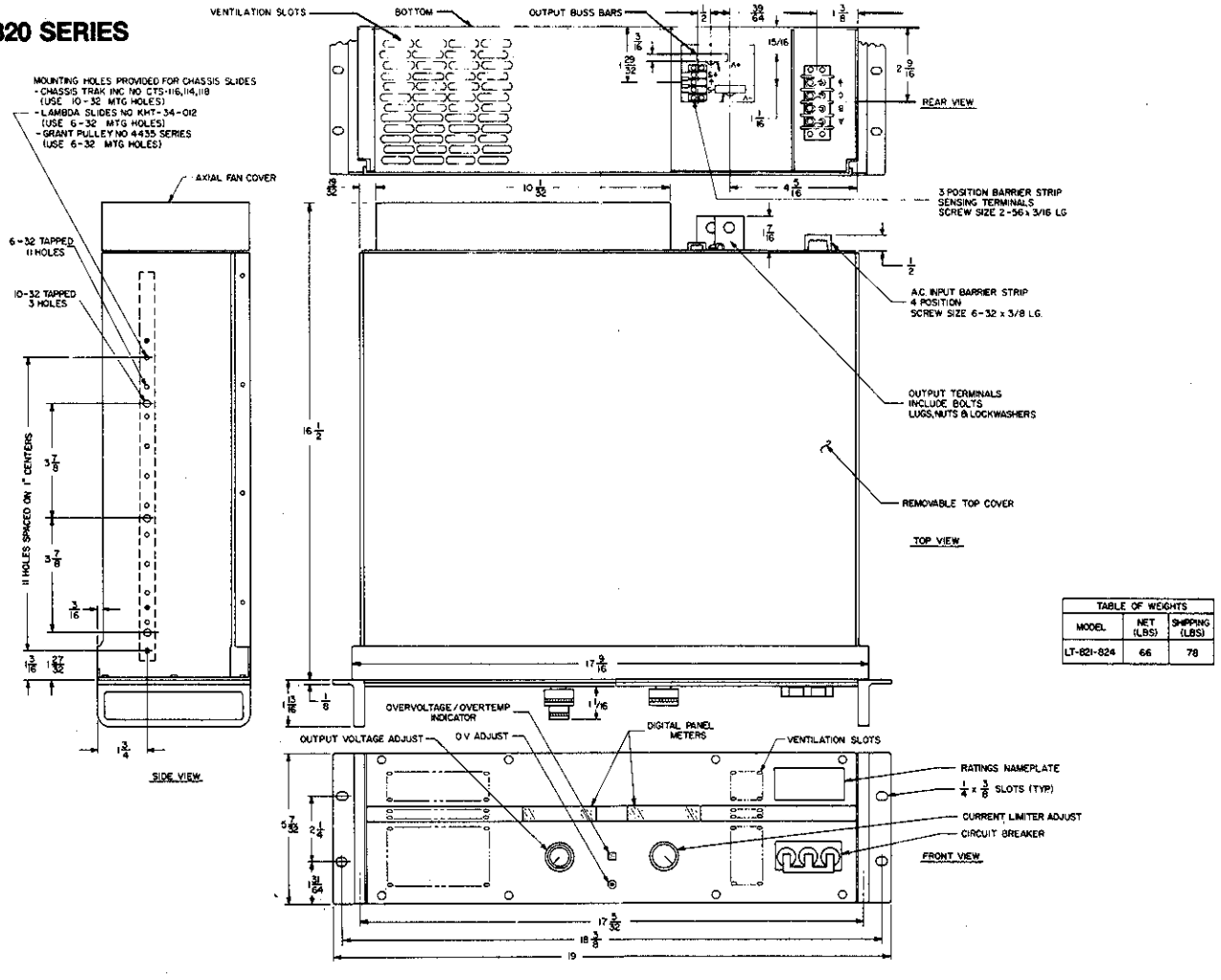


TABLE OF WEIGHTS		
MODEL	NET (LBS)	SHIPPING (LBS)
LT-821-824	66	78