

SPECIFICATIONS AND FEATURES

Specifications apply for all metered models.

DC OUTPUT--Voltage regulated for line and load

Voltage Range.....TABLE I
VOLTAGE RANGE

MODEL	LPD-421AFM	LPD-422AFM	LPD-423AFM	LPD-424AFM	LPD-425AFM
VOLTAGE RANGE VDC	0-20	0-40	0-60	0-120	0-250

Multi-Current Ranges.....Current range must be chosen to suit the appropriate maximum ambient temperature. Current ratings apply for entire voltage range.

TABLE II
MAX. CURRENT

MODEL	MAX. CURRENT AT AMBIENT OF:			
	30°C	40°C	50°C	60°C
LPD-421AFM	1.7	1.5	1.3	0.9
LPD-422AFM	1.0	.850	0.70	0.55
LPD-423AFM	0.7A	0.6A	0.5A	0.4A
LPD-424AFM	0.38A	0.32A	0.26	0.20
LPD-425AFM	0.13	0.12	0.11	0.10

REGULATED VOLTAGE OUTPUT

Regulation (line)..... 0.01 percent plus 1.0 millivolt for input variations from 105-132 or 132-105 volts AC

Regulation (load)..... 0.01 percent plus 1.0 millivolt for load variations from no load to full load or full load to no load

Remote Programming

External Resistor Nominal 200 ohms/volt output
Programming Voltage One-to-one voltage change
Ripple and Noise 500 microvolts (or 1 mv for LPD-425FM) rms; 1.5 millivolts (or 3 mv for LPD-425FM) peak-to-peak with either positive or negative terminal grounded
Temperature Coefficient Output change in voltage less than $(0.015\% + 0.5 \text{ mv}) / ^\circ\text{C}$

DC OUTPUT--Current regulated for line and load; automatic crossover with voltage limit

Multi-Current Ranges..... Current range must be chosen to suit the appropriate maximum ambient temperature. Current ratings apply for entire voltage range. For maximum current range see Table II Minimum current 1% of 30⁰ ambient rating in Table II or 5 ma., whichever is greater.
Voltage Range For voltage range see Table I; voltage ratings apply for entire current range.

REGULATED CURRENT OUTPUT; AUTOMATIC CROSSOVER

Regulation (line) 5 milliamperes for line variations from 105-132 or 132-105 volts AC
Regulation (load) 5 milliamperes for load voltage changes from 0 to max. or max. to 0 volts DC

AC INPUT--105-132 volts AC at 47-440 Hz. For input power see Table III.

Ratings apply for 57-63 Hz; derate current 10% for 47-53 Hz input; for other input frequencies consult factory.

TABLE III
INPUT POWER, WATTS*

MODEL	INPUT POWER
LPD-421AFM	175 Watts
LPD-422AFM	190 Watts
LPD-423AFM	180 Watts
LPD-424AFM	170 Watts
LPD-425AFM	115 Watts

*With output loaded to full 30⁰C rating and input voltage 132 volts AC, 60 Hz

OVERLOAD PROTECTION

Thermal Thermostat, resets automatically when over-temperature condition is eliminated

Electrical

External Adjustable, automatic, electronic current-limiting circuit, settable to 105 percent of rated current; limits output current to preset limit for protection of load and power supply when external overloads and direct shorts occur

Internal Fuse, "SLO-BLO", 3AG; fuse F1 protects the AC input circuit. Overload of the supply does not cause fuse failure

Fuse F2 provides protection against internal circuit failure in conjunction with overvoltage protector option

INPUT AND OUTPUT CONNECTIONS --Heavy duty terminal block on rear of chassis with 5-foot, 3-wire detachable line cord for all models; five-way binding posts provide for additional positive (+), ground, and negative (-) DC output connections, on front panel of all models

OPERATING AMBIENT TEMPERATURE RANGE AND DUTY CYCLE--Continuous duty from 0°C to 60°C ambient with corresponding load current ratings for all modes of operation

STORAGE TEMPERATURE-
(non-operating) -55°C to +85°C

METERS-Voltmeter and ammeter on all models.

CONTROLS

DC output controls..... Coarse and fine voltage and current controls (single ten turn controls for models LPD-424AFM and LPD-425AFM) permit adjustment of DC output; located on front panel of all models

Binding Posts (+) (-) (GND).... Five-way binding posts on all models.

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

Power..... Panel mounted switch and indicator light for all units

PHYSICAL DATA

Size. 5-3/16" H x 8-3/8" W x 10-5/8 D
Weight 13 lbs. net; 16 lbs. shipping wt.

MOUNTING:

Laboratory bench, table top. . Bumpers secured to the base of all LPD suffix A units permit proper circulation of air through the unit. Removal of bumpers will restrict free-flow of air through the unit; avoid removing bumpers

Standard 19" Rack All LPD suffix A units can be used with rack adapters: LRA-1 (slide accomodation provided)
LRA-2 (conventional mount) See figure 14

MODEL OPTIONS

Suffix "R" Fungus Proofing
Option. Standard LPD suffix A power supplies can be obtained with fungus proofing treatment with MIL-V-173 varnish for all fungi nutrient components

Suffix "V" Option. Standard LPD suffix A power supplies can be obtained for 205-265 VAC, 50 Hz input or for 187-242 VAC, 50 Hz input. See nameplate for AC input rating. See schematic diagram for rewiring of AC input.

ACCESSORIES

Rack Adapters Rack adapter LRA-1, with or without chassis slides is available as well as rack adapter LRA-2 which is used for simple rack installations where chassis slides are not required

Blank Panels Half-rack and quarter-rack panels can be used with the Lambda rack adapters, see figure 14

Overvoltage Protector Externally mounted, Overvoltage Protectors LHOV-4, LHOV-5 and LHOV-6 are available for use with LPD suffix A power supplies
LPD-421AFM, LPD-422AFM and LPD-423AFM.