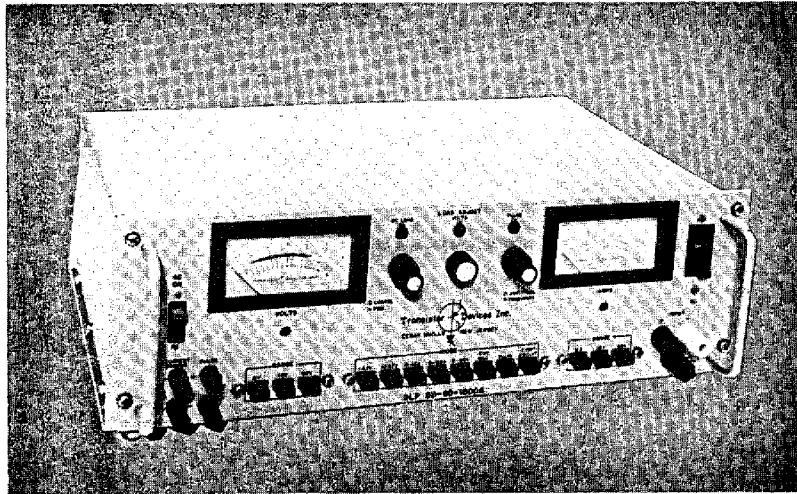


# ***DLP*** SERIES

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***pulse and steady state electrical loads***



The DLP series is the most popular of the Dynaload line. These medium to high power units offer not only resistive loading and constant current loading, but incorporate an internal square wave modulator for pulse loading. This function allows for precise measurement of load transient response and stability. Since this function is independent of all other load ranges, a pulse signal can be added directly on any pre-established DC load level.

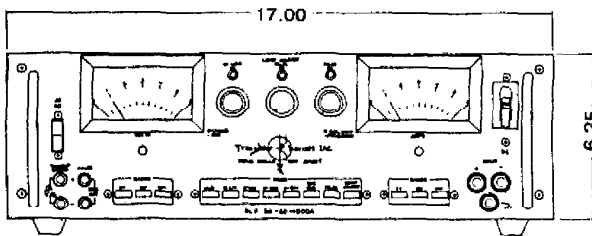
A calibrated current sample is provided on the front panel for monitoring current waveforms. A sync output is also provided to synchronize test equipment. External modulation inputs on the rear panel allow the user to program any DC level or waveform. DC inputs on both front and rear panels make the unit versatile in both fixed and portable applications.

Mounting ears are provided for standard rack installation. The large easy-to-read meter makes the use of external metering unnecessary. This, in conjunction with the coarse and fine load adjust controls, makes precision loading easy. Short circuit is also provided for current measurement in a shorted condition.

Protection is provided by both current and power limits, at which point the unit simply folds into a linear limit curve. Overvoltage protection incorporates the use of a crowbar circuit across the DC input to assure the unit is not damaged by excessive input voltage. Reverse polarity protection is also provided. Digital voltmeter and ammeter are available as an option.

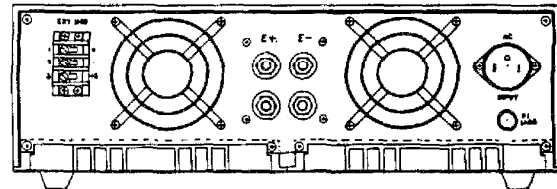
# SPECIFICATIONS

MODEL:	DLP 50-60-1000A	DLP 50-150-3000A (Not Pictured)	DLP 130-15-750A	DLP 130-50-2500A (Not Pictured)	DLP 400-5-750A
OPERATING VOLTAGE	3-50V	3-50V	5-130V	5-130V	30-400V
LOAD CURRENT	0-60A	0-150A	0-15A	0-50A	0-5A
MAXIMUM POWER	1000W	3000W	750W	2500W	750W
VOLTMETER RANGES	0-6V 0-18V 0-60V	0-6V 0-18V 0-60V	0-18V 0-60V 0-180V	0-18V 0-60V 0-180V	0-60V 0-180V 0-600V
AMMETER RANGES	0-6A 0-18A 0-60A	0-18A 0-60A 0-180A	0-1.8A 0-6A 0-18A	0-6A 0-18A 0-60A	0-.6A 0-1.8A 0-6A
RESISTANCE RANGES	1A/V 10A/V	5A/V 30A/V	.5A/V 3A/V	1A/V 10A/V	.01A/V .03A/V
CONSTANT RANGES	0-10A 0-60A	0-30A 0-150A	0-3A 0-15A	0-10A 0-50A	0-1A 0-5A
PULSE LOAD RANGE	0-60A peak	0-150A peak	0-15A peak	0-50A peak	0-5A peak
PROGRAM INPUT	All models 0-6V @ 1mA				
PROGRAM LINEARITY	All models less than $\pm 1\%$ from 10% to full load				
FREQUENCY ADJUST	All models 500-5K Hz				
PULSE WIDTH	All models 50% Duty Cycle				
RESPONSE TIME	All models less than 50usec				
METER ACCURACY	All models less than $\pm 3\%$				
CONSTANT VOLTAGE	0-50V	0-50V	0-100V	0-130V	0-400V
OVERVOLTAGE	60V max	60V max	150V max	150V max	500V max
CURRENT LIMIT	68A max	180A max	20A max	60A max	7A max
POWER LIMIT	1200W max	3400W max	1000W max	3000W max	1000W max
IEEE BUS INTERFACE	See Page 21	See Page 21	See Page 21	See Page 21	See Page 21

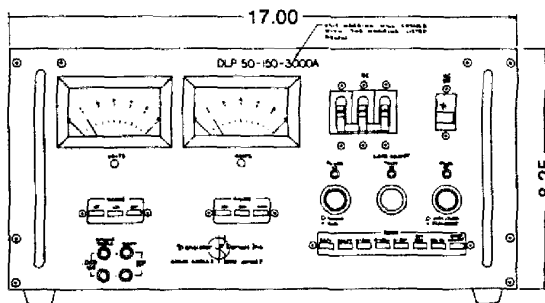


DEPTH—10.88

DLP 50-60-1000A  
DLP 130-15-750A  
DLP 400-5-750A

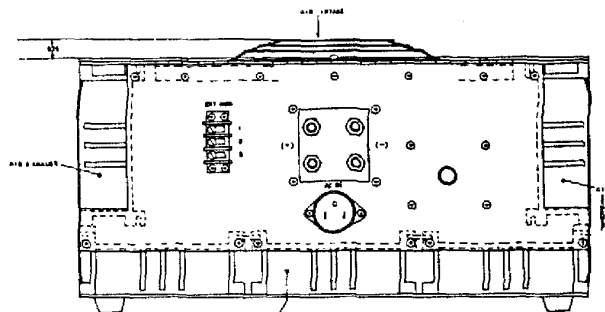


WEIGHT—25 Lbs.



DEPTH—17.56

DLP 50-150-3000A  
DLP 130-50-2500A



WEIGHT—45 Lbs.

# STANDARD FEATURES

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- AC Input:** 115 VAC  $\pm$  10%, 47-63 Hz
- DC Input Terminals:** Input terminals are located for convenience on both front and rear panels of most models. We recommend using the rear input terminals when loading above 15 amps. The DLR series and high power models have input terminals on the rear only.
- Twin Load Adjusts:** All models with manual controls have both coarse and fine load controls for greater resolution. The DLR series has a single load control.
- Voltmeters:** On the DLR, DLP, and DLVP models, a three-range voltmeter is provided for monitoring input levels.
- Ammeters:** The DAL, DLR, DLP, and DLVP models have a three-range ammeter for visual measurement of current. Each range is accurate to  $\pm$ 3%.
- Amps per Volt Ranges:** The two ranges on manually controlled units represent resistive loading. Maximum loading current is equal to the input voltage, multiplied by the ratio indicated. This allows replacement of a wide variety of load resistors with a single Dynaload.
- Constant Current:** This mode is used to produce a constant load on any variable source. Typical current regulation is  $\pm$ 1%, with less than .1% RMS ripple current. This mode is excellent when using a Dynaload as a current regulator.
- Constant Voltage:** On the DLR, DLP, and DLVP models, constant voltage regulation can be used for a variety of applications, such as battery simulation, voltage limiter, or shunt regulator. This mode is also used when connecting Dynaloads in series.
- External Programming:** All units have provisions for external modulation. A terminal input is located on the rear panel for convenience.
- Short Circuit:** On the DAL, DLP and DLVP models, a short circuit contactor is provided for measurement of current flow under a shorted condition. \* This feature is not found in 400V models.
- Pulse Loading: (DLP Series)** This function is a fixed square wave, having a 50% duty cycle with a variable amplitude and variable frequency of 500 Hz to 5 KHz. A current sample output is provided for measurement of current waveforms. A sync output is also provided for synchronizing other test equipment to the load pulse.
- Pulse Loading: (DLVP Series)** With the same loading characteristics and sample outputs as the DLP series, the DLVP series adds the dimension of variable pulse width. With a variable duty cycle of 10% to 100%, and an extended frequency range of 10 Hz to 5 KHz, a wide variety of pulse waveforms can be generated. Three separate frequency ranges and two load ranges are provided for greater sensitivity.
- Protection:** All Dynaloads are protected against overcurrent, overpower, overvoltage, and reverse polarity.
- Mounting Brackets:** With the exception of the DAL, DLF, DLM and DLR series, brackets are provided for mounting in a standard 19 inch rack.
- Testing:** All units are double tested to guarantee proper operation and are then calibrated as per MIL-STD-45662.

\*NOTE: Caution should be used when shorting batteries and large capacitor banks, as the instantaneous current could damage the unit.

