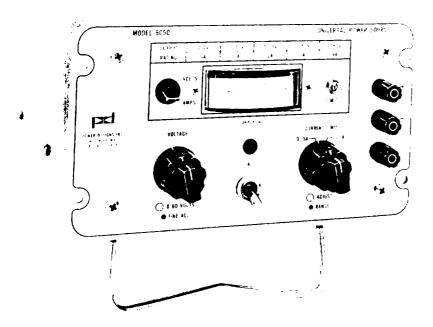


MULTI-OUTPUT DC POWER SOURCE



The Model 6050 UNIPLY' replaces five regulated DC power supplies with a single instrument, through a new regulator technique providing features hitherto unavailable in conventional units.

Output voltage and current ranges cover a broad spectrum of laboratory requirements for both digital and analogue applications.

Ranging is transient-free and automatic with changes in load and the setting of voltage and current controls. Operation is completely electronic, without relays or manual switching.

The RFI-free regulator system employs linear circuits only. No SCR's, switching transistors or high frequency techniques are utilized.

Power output capability of the supply increases with increasing AC line voltage. Up to twice rated output is

available at line voltages over 105 volts. Useful regulated output at reduced levels is available down to a line voltage of 85 volts.

A flashing panel indicator signals inability of the supply to meet load demands in excess of control settings or the inability of the AC line voltage to support increased output levels.

The supply may be operated continuously into an overload or short circuit without damage.

Regulator efficiency is superior to conventional, wide voltage range, dissipative type systems.

Compact and light, the Model 6050 is designed for portable, laboratory bench or rack use. A bail/carrying handle assembly permits tilting of the front panel for viewing ease. 5½" high panel adapters are available for assembling one or two units in a standard 19" rack.

*Patents applied for

63.11

POWER DESIGNS PACIFIC, INC. 3381 MIRANDA AVE., PALO ALTO, CALIFORNIA 94304





MODEL 6050

- Concentric coarse and fine voltage controls with a resolution of 3 millivolts.
- Dual range 0.5/5.0 ampere current limiter. Meter range shifts automatically.
- Remote voltage programming at 500 ohms/volt.
- Remote sensing of output voltage.
- Front and rear access output terminals.
- Parameter specifications based on anticipated performance after five years of service.
- Semiconductors processed under a "predictable reliability" program to insure long life expectancy. This program includes source coding of all devices, 100% incoming inspection and measurement of parameters beyond operating regions to expose channeling phenomena, surface contamination, safe operating areas, etc. Zener voltage references and input stage transistors are preaged and life expectancy extrapolated through I/F noise change techniques during burn-in.
- Each power supply operated under maximum stress conditions for a minimum of fifty hours prior to final inspection.
- Manufacturing procedures and processes are equal to or exceed those of MIL-Q-9858.

Input: 105-125 volts, 57-440 Hz. 100 watts nominal.

Output: 0-60 volts DC. continuously adjustable with the following minimum output:

Line Regulation: 0.01% ±1 millivolt for line variations from 105-125 volts.

Load Regulation: $0.01\% \pm 1$ millivolt for load variations from 0-100% of rated output current, measured at rear terminals or at the junction of load and sense leads. Without remote sensing, regulation at front panel terminals is $0.01\% \pm 1.5$ millivolt per ampere of output current (due to binding post voltage drops).

Polarity: Either positive or negative output terminal may be operated at ground potential.

Ripple and Noise: Less than 1 millivolt peak-to-peak over 0-1 MHz band with an input line frequency of 60 Hz.

Source Impedance: Less than 0.005 ohm at DC, 0.1 ohm to 20 KHz, 1.0 ohm to 1 MHz.

Recovery Time: Less than 50 microseconds to return to within a 15 millivolt band of the original voltage for a step change in rated load of 10% to 100% (1 microsecond rise time).

Stability: Less than 0.02% +3 millivolts per 24 hours after warm-up at constant line, load and ambient temperature. Less than 0.01% +1 millivolt with external remote programming resistance.

Operating Temperature: 0-50 C at full load. Storage: -20 C to +85 C.

Temperature Coefficient: Less than 0.02% per degree C. Current Limiting: Concentric switch/potentiometer provides continuous adjustment of output current in two ranges: 0-500 milliamperes. 0-5 amperes.

Metering: Front panel "edgewise" meter and a selector switch permits monitoring output voltage or current with an accuracy of +2% of full scale. Current range changes automatically with current limiter range switch.

Output Terminals:

Front Panel: Three insulated, 5-way binding posts for positive, negative and ground.

Rear Panel: Seven screw terminals on a molded barrier block for positive and negative output, chassis ground, remote voltage programming and remote sensing.

Remote Programming: Rear panel terminals are provided for external resistance programming of the output voltage. The ratio of the programming resistance to output voltage is 500 ohms per volt with a ratio accuracy of 15%, and a programming linearity of 0.01% of maximum output voltage.

Dimensions: 838" wide x 434" high x 11916" deep.

Weight: 1512 lbs.

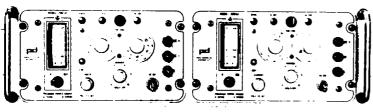
Finish: Brushed anodized natural aluminum etched panel with black nomenclature. Blue vinyl laminated steel dust cover. Gold iridite bottom plate.

Rack Panel Adapters: Brushed aluminum finished panel 5½" x 19" for mounting a single Model 6050: Type RRG-3 (unit mounts in center of panel). Type RRG-1 (unit mounts left or right side of panel).

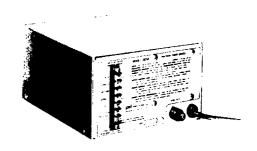
Brushed aluminum finished panel $5^{1}4^{\circ}$ x 19" for mounting two Model 6050 units, side by side: Type RRG-2.

Price: \$12.50 each.

PRICE: \$195.00 F.O.B. Westbury, New York.
Prices subject to change without natice



Pair of typical power supplies shown in type RRG 2 Panel Adapter



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