

## JRL GTX DC VOLTAGE SOURCE

- $3\mu\text{V}/\text{V}$  OUTPUT STABILITY
- DIALABLE OUTPUT VOLTAGE
- EXCELLENT STABILITY
- REMOTE SENSING
- 1 PPM RESOLUTION
- RUGGED AND PORTABLE
- 0.0025 % ACCURACY



Designed by Julie Research Laboratories, the GTX is a high quality, compact, portable DC voltage source with low output impedance. It provides an economical alternative to higher-cost calibrators when other functions are not needed.

The output range may be switched between 1 and 10 volts. The output polarity may be either positive or negative. Output settings from 1 microvolt to 10 volts can be made by dialing the desired value.

Load voltage is sensed (remote sensing) so that the output voltage appears at the load instead of at the output terminals. This feature permits the use of an external sensing resistor to convert the GTX to a regulated current source. Loads of up to 25 mA can be driven without loss of accuracy.

Supplied on a build-to-order basis, Ohm-Labs offers support for this and other Julie Research Labs instruments.

### Specifications:

Accuracy: 0.0025 % of setting plus  $5\mu\text{V}$

Ranges: 0-1 and 0-10 volts DC, switch selected.

Resolution: 0-1 V range 1 microvolt; 0-10 V range 10 microvolts

Output Noise & Ripple: <0.001% of setting or 30 microvolts peak, whichever is greater, exclusive of random transients.

### Output Stability:

24 hour: <3 ppm +5 microvolts (after 1 hour warmup)

12 month: <25 ppm +5 microvolts

Output Isolation: >1000 megohms, <20 pF

Output EMF Temp Coefficient: <5 ppm/°C, 0-40 °C

Output Impedance: <50 micro-ohms

Isolation From Line: Floating output, either terminal may be grounded or guarded up to 500 volts with respect to ground

Line Regulation: <5 ppm of setting for a  $\pm 10$  volts change in input voltage.

Output Current: Up to 25 mA, regulation <10 ppm

Remote Sensing: 4 output terminals are provided so that the GTX can sense and provide the dialed voltage at the load. In this way, lead resistance is compensated for.

Warm-up time: Instantaneous operation. For best stability, allow 60 minutes.

Output load regulation: <5 microvolts, no load to 25 mA

Input Power: 90-240 volts, 50-400 Hz

Size: 152 x 178 x 165 (6" x 7" x 6.5")

Weight: 2 kG (4 lbs)

