# Typical Output Stability of an LDX-3100 Board-Level Current Source

TECH NOTE

This technical note presents the results of output drift measurement tests performed on a typical LDX-3100 Board-Level Precision Current Source.

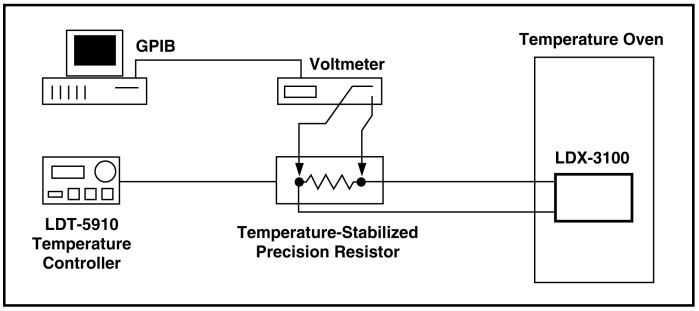


*Figure 1. Measurement Setup Diagram.*

## MEASUREMENT SETUP

The measurement setup is shown in Figure 1. The LDX-3100 was placed in a temperature-controlled environment and stabilized for one hour at 25°C. Output current measurements were made by measuring the voltage across an ultra-stable precision resistor which was also temperature controlled. The starting current was 125 mA. Raw data was fed to a computer and converted to drift data in parts per million (ppm). These results were graphed, as shown in Figures 2(a) and 2(b).

## RESULTS

It can be seen from the results in Figures 2(a) and 2(b) that the LDX-3100 exhibited a stability of better than ±25 ppm over 24 hours and better than ±15 ppm over 1 hour.

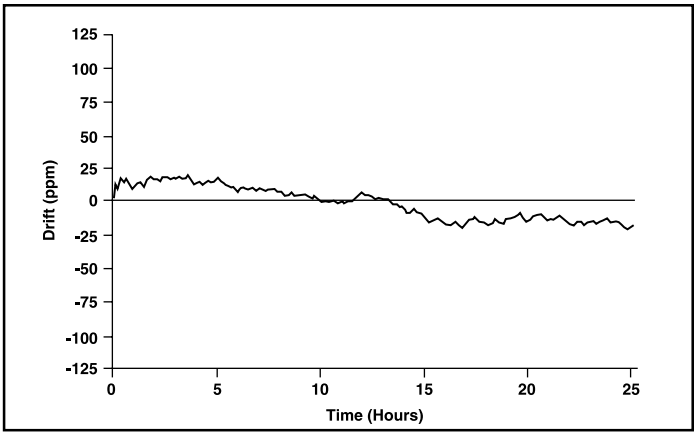


*Figure 2(a). Stability Measurement Results (24 hr).*

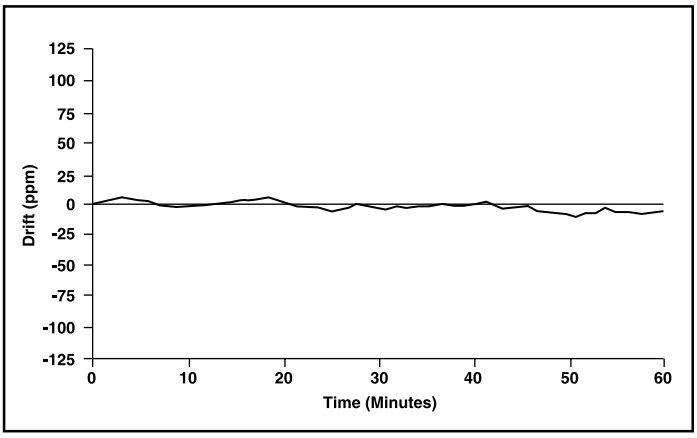


*Figure 2(b). Stability Measurement Results (1 hr).*