

TECH NOTE

Long-Term Output Stability of an LDX-3525B Precision Current Source

OVERVIEW

This technical note presents the results of output drift measurement performed on a typical production model LDX-3525B Precision Current Source

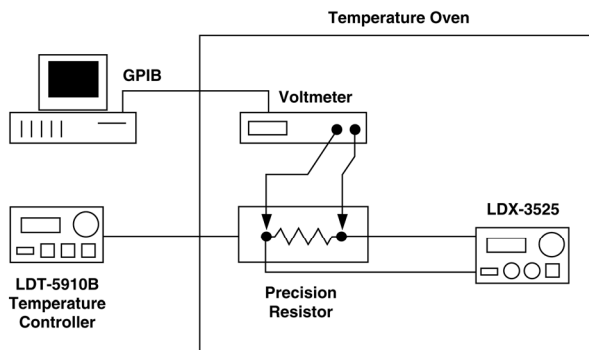


FIGURE 1: Measurement Setup

RESULTS

It can be seen from the results in Figure 2 that the LDX-3525B maintained a stability of better than ± 10 ppm for a period of over 24 hours.

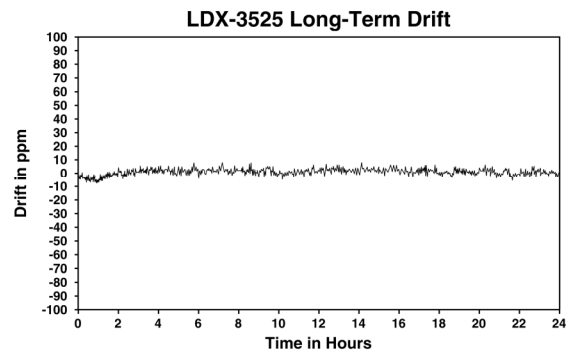


FIGURE 2: LDX-3525B Drift Measurement Results

MEASUREMENT SET UP

The measurement setup is shown in Figure 1. The LDX-3525B was placed in a temperature controlled oven and stabilized for one hour at 20°C. The LDX-3525B was placed in low (200 mA) range, and the output current was set to 100 mA. Current measurements were taken every two minutes by measuring the voltage across an ultra-stable precision resistor which was also temperature controlled. Raw data was fed to a computer and converted to drift data in parts per million (ppm). The results were graphed, as shown in Figure 2.