# TECH NOTE

# Output Current Accuracy of an LDX-3525B Precision Current Source

## OVERVIEW

This technical note presents the results of measurement (display) accuracy tests performed on a typical production model LDX-3525B Precision Current Source.

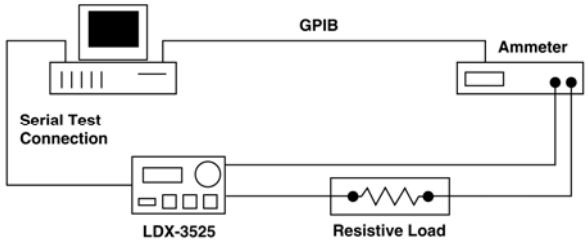


*FIGURE 1: Measurement Setup*

## MEASUREMENT SET UP

The test setup is shown in Figure 1. The LDX-3525B was placed in low range (200 mA max.) and was set to drive a precision resistor. The LDX-3525B set current was adjusted (at 10 mA intervals up to full scale) via an internal serial connection. Actual output current was measured with a calibrated ammeter. The LDX-3525B current measurement (front-panel display) values were compared to actual current values. Raw data was fed to a computer and converted to accuracy data as a percent of full-scale current (% FS). The results were graphed, as shown in Figure 2. Test were repeated with the LDX-3525B set to high range (500 mA max.), and results shown in Figure 3.

## 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.

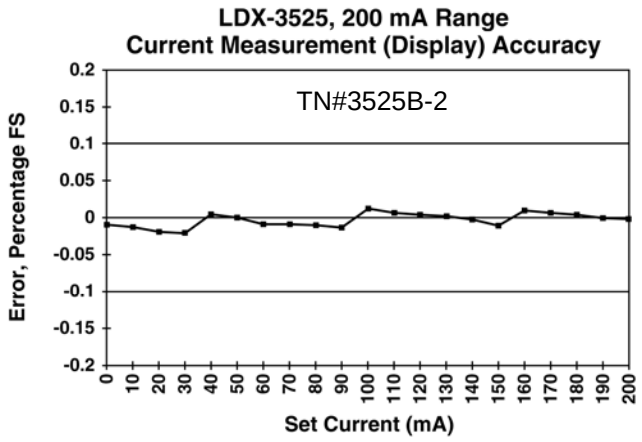


*FIGURE 2: Current Accuracy Measurement (200 mA range)*

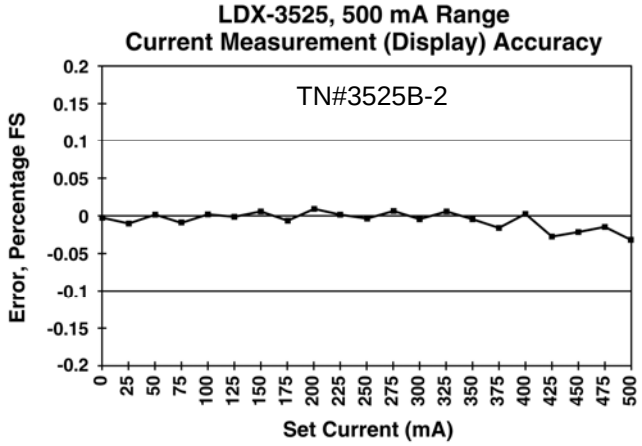


*FIGURE 3: Current Accuracy Measurement (500 mA range)*