

Ar-CO₂ Gas Studies and Clean Room Construction

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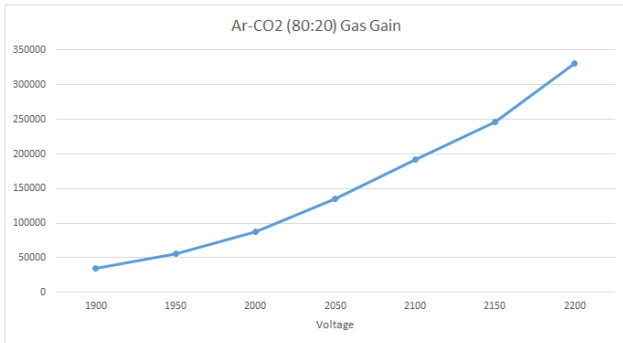
July 2, 2015

Overview

- ▶ Gas Gain (Completed)
- ▶ Flow Rate Tests
- ▶ Clean Room Construction
- ▶ Drift Time Studies (In Process)

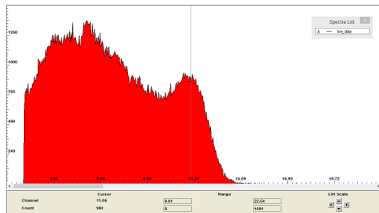
Gas Gain

Voltage	Gain
1900	34691
1950	55616
2000	87555
2050	135737
2100	191905
2150	245955
2200	330947

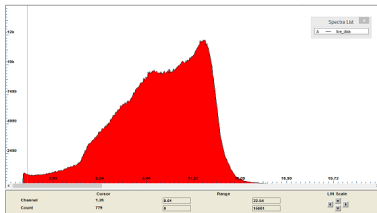


Flow Rate

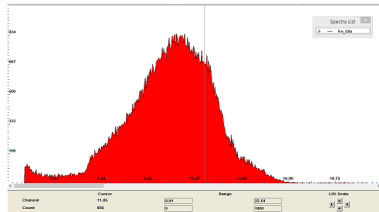
Flow Rate: 1cc/s



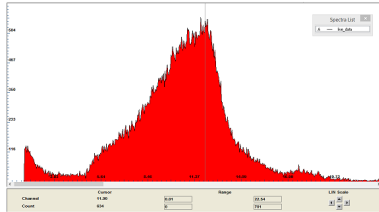
Flow Rate: 2cc/s



Flow Rate: 4cc/s



Flow Rate: 5cc/s



Pile-Up Rejection

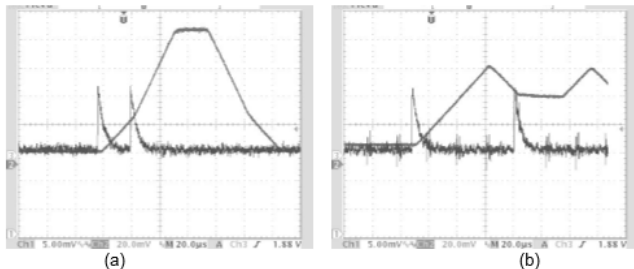
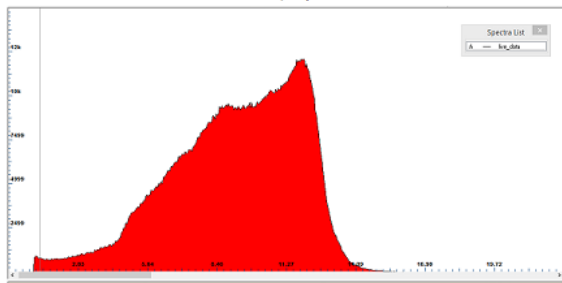


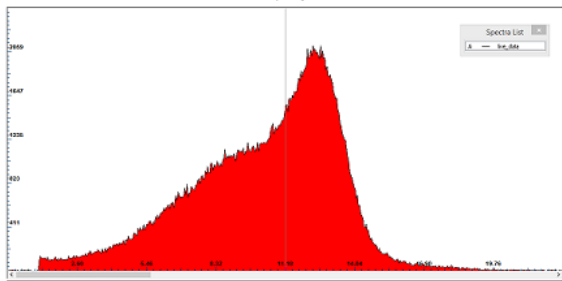
Figure 2-7. Oscilloscope traces illustrating the dead time and pile-up reject performance of the DP4

Comparison of Pile-Up Rejection On/Off

With Pile-Up Rejection



Without Pile-Up Rejection



Clean Room

