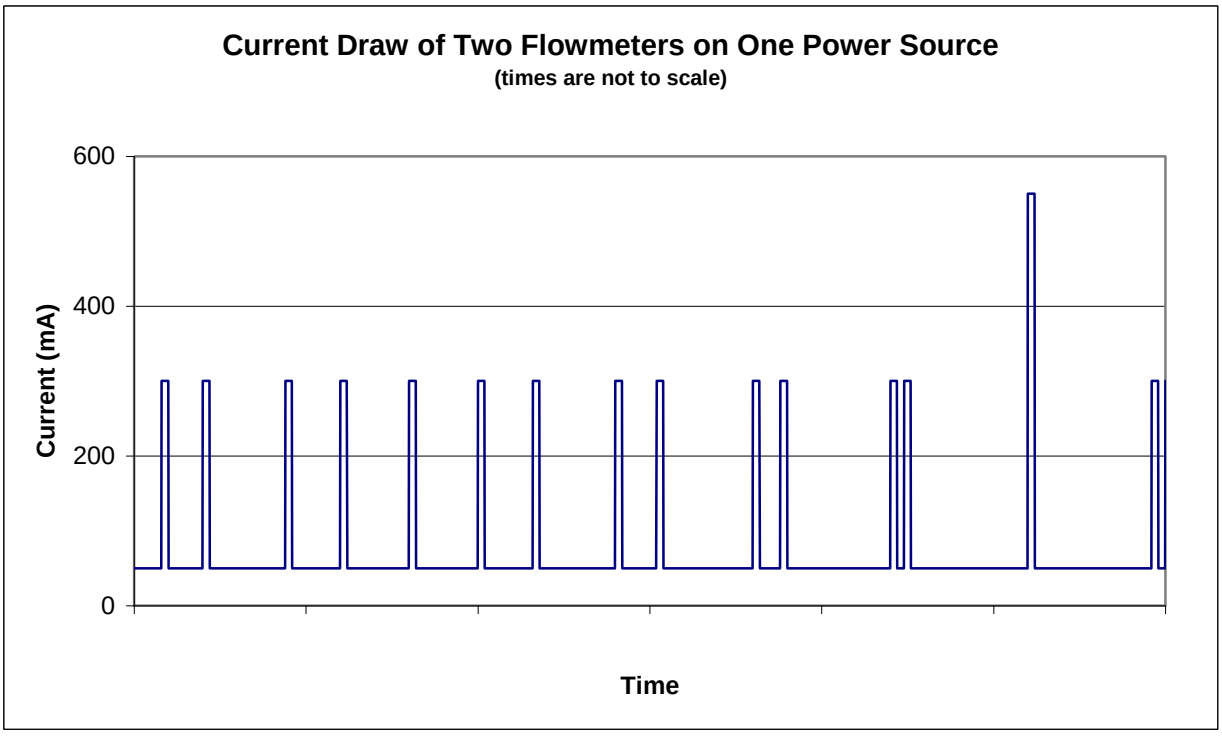
ATTACHING MULTIPLE 4200 SERIES METERS TO ONE POWER SOURCE

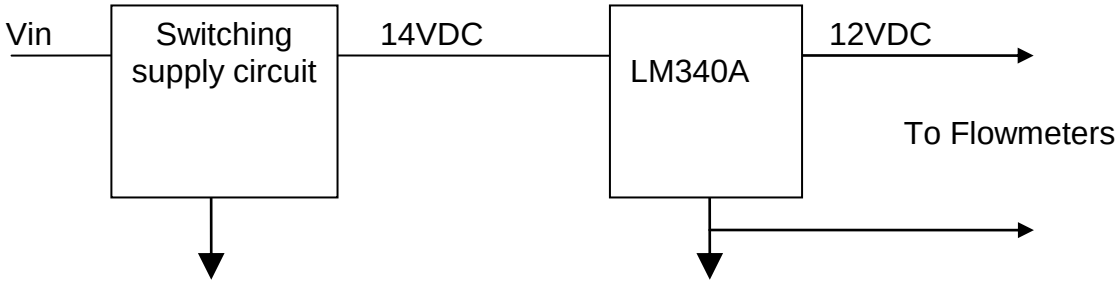
APPLICATION NOTE FLOW-006

August 2004

The flowmeter draws a 20 microsecond pulse of current of 250 mA on top of 50 mA steady state current. The power supply needs to be capable of supplying at least 10.0V during current pulses (11.4V for the intrinsically safe versions). If multiple meters attached to the same power source, then these pulses occasionally will become in phase. Typically a switching power supply without a linear regulator on the output will not be fast enough to adjust to this sudden change in current. Also, most capacitors have too much series resistance to overcome this and could degrade because of the frequent charging and discharging. Using a slightly higher output on the switching power supply output and a simple 12V linear regulator (like a National Instruments LM340A) should work in most cases.



Example Circuit



UNDERSTANDING, ACCELERATED

TSI Incorporated – Visit our website **www.tsi.com** for more information.

USA	**Tel:** +1 800 874 2811	**India**	**Tel:** +91 80 67877200
UK	**Tel:** +44 149 4 459200	**China**	**Tel:** +86 10 8251 6588
France	**Tel:** +33 4 91 11 87 64	**Singapore**	**Tel:** +65 6595 6388
Germany	**Tel:** +49 241 523030		

