

Split flowmeter signals for alarming and monitoring

APPLICATION A148

Type of Company: Natural Gas Distribution Company

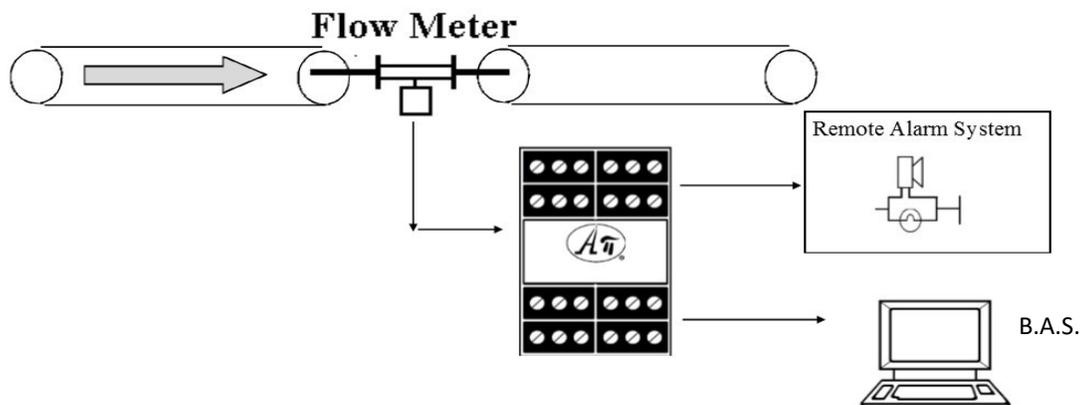
Location: Illinois

Gas flowing from higher to lower pressure is the fundamental principle of the natural gas delivery system. Within each distribution system, there are sections that operate at different pressures, with regulators controlling the pressure. The gas utility's central control facility continuously monitors flow rates and pressures at various points in its system because the operators must ensure that the gas reaches each customer with sufficient flow rate and pressure to fuel equipment and appliances. They also ensure that the pressures stay below the maximum pressure for each segment of the system.



The Engineering Issue

- The gas company has to send their customer a 4-20 mA signal from the flow meter for the customer's remote alarm monitoring system, and for their building automation system.
- They cannot add another flow meter and have discovered that both isolation and increased drive capability are required for this signal.



The engineer used an APD 4393 IsoSplitter[®]. The APD 4393 accepts the 4-20 mA signal from the flow meter and provides two optically isolated outputs with 20 V compliance. The unit isolates and amplifies the flow meter signal and provides an economical solution.

Problem. Solved.