

Splitting a signal to both a PLC and a controller

APPLICATION A160

Type of Company: [Manufacturer, Foam Insulation Panels](#)

Location: [Minnesota](#)

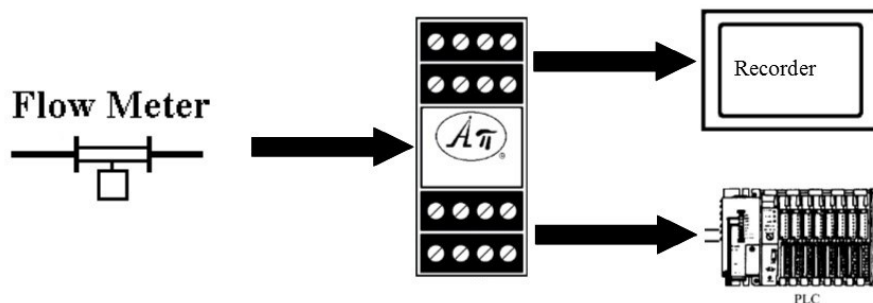
Heating and cooling costs can account for 50-70% of energy costs in the average American home. To help reduce heating and cooling costs, maintain uniform temperature, and lower noise levels in homes and commercial properties, builders turn to rigid foam insulation panels. The basic types of rigid foam board insulation are expanded polystyrene, extruded polystyrene, and polyisocyanurate unfaced or foil faced.

This customer is a manufacturer of these foam panels. During the manufacture of the panels, chemicals are injected to expand foam insulation cells. The company uses a Micro Motion flow meter to monitor the amount of chemical injected.



The Engineering Issue

- The company added an Allen Bradley (Rockwell Automation) PLC for better process control and monitoring; however, the flow meter signal from the process must still go to the Partlow recorder/controller for the purposes of controlling the machine drive motors as well as the chemical pump.
- The flow meter signal had to simultaneously connect to both PLC and the controller.



The customer chooses to use an APD 4393 IsoSplitter® between the flow meter and the controller. The APD 4393 was able to power the flow meter and has two independent outputs: one was used for the recorder/controller and the other for the Rockwell PLC.

Problem. Solved.