## API-Cecomp Group n'fo

## **Technical & Application Note A160**

Application: Splitting a signal to both a PLC and a controller

Type Of company: Manufacturer of foam insulation panels

Location: Minnesota

<u>Problem:</u> The customer is a manufacturer of foam insulation panels. During the manufacture of the panels the customer injects chemicals to expand the cells in the foam insulation and uses a Micro Motion flow meter to monitor the amount of chemical injected into the foam to expand the cells. The flow meter signal goes to a Partlow recorder/controller which controls the drive motors for the machine, the pump for the chemical and records the results. The customer wanted to add an Rockwell Automation (Allen Bradley) PLC for better process control and monitoring. When they did their plant upgrade they required the flow meter signal (4-20 mA) to operate both the Partlow recorder and the PLC simultaneously. The controller function of the Partlow unit was disabled and the PLC used for PID control. <u>Solution:</u> The customer choose to use an APD 4393 signal splitter between the Micro Motion flow meter and the Partlow recorder/controller. The APD 4393 was able to power the loop for the flow meter and has two independent outputs which was used for as the input to both the Partlow recorder and the Allen Bradley PLC.



APD 4393

DC to DC Signal Splitter/Isolator/Transmitter



