

Split signals for separate monitoring and control

APPLICATION A143

This pharmaceutical company uses an Emerson Process (formerly Fisher/Rosemount) Delta V automation management system to control the plant manufacturing system. The HVAC engineers want to monitor differential pressure, relative humidity and temperature separately in their clean rooms, but the Delta V system also needs to monitor these signals to maintain product compliance and archive FDA validation for QA purposes. The company cannot add another set of sensors.

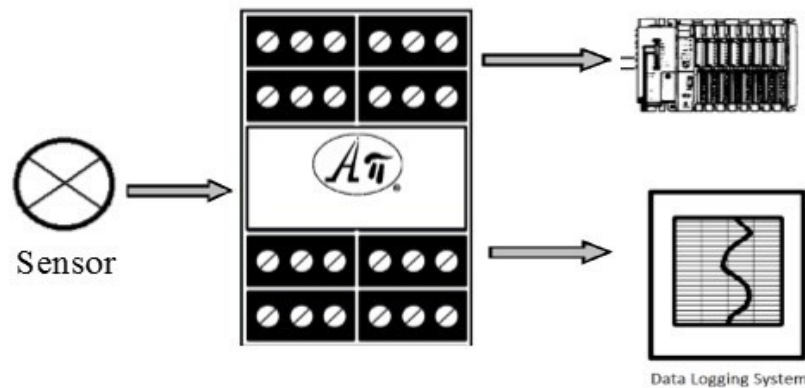
Type of Company: [Manufacturer, Pharmaceuticals](#)

Location: [Illinois](#)



The Engineering Issue

- The process signal must be monitored in two places simultaneously; One of the signals must go to the process control system and the other signal must be provided to the quality assurance monitoring system.



The engineer used an APD 4393 DC-to-DC IsoSplitter®. The APD 4393 accepts the 4-20 mA signal from the sensor and provides two optically isolated outputs that are linearly related to the inputs. The two isolated output channels provided an economical solution where more than one output device needs to be connected to the same input signal.

Problem. Solved.

