

# Monitoring wind speed

## APPLICATION A179

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

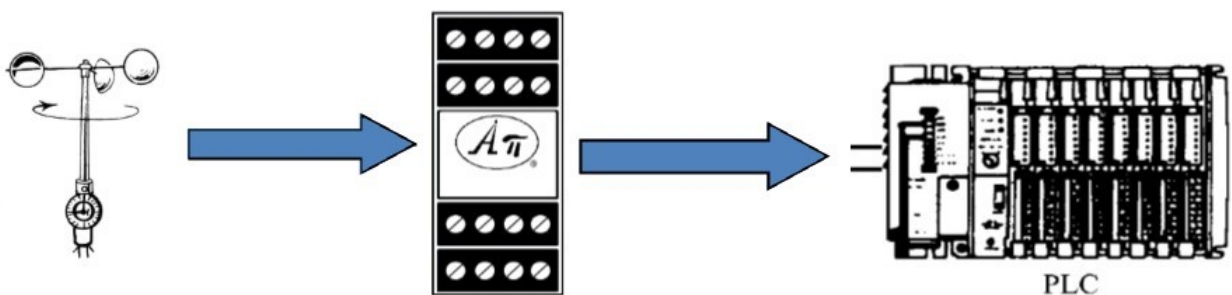
Location: [Massachusetts](#)

This company manufactures self-powered anemometers for use on cranes, wind turbines, and other outdoor staging equipment. Wind speed must be monitored on these large structures due to equipment and personnel safety risks associated with strong winds. The effects of wind on these structures has the potential to affect the stability and/or structural integrity of the crane/turbine which may lead to material falling or people being knocked over, perhaps from a height.



### The Engineering Issue

- The company's customer needs to monitor the DC voltage signal from the self-powered anemometer.
- This application requires that the anemometer signal be powered, isolated and converted, and sent to the PLC so that crane/turbine control is restricted during sustained strong winds.



The company's engineer used an APD 4380 to power the anemometer and convert the output to a 4-20 mA signal for the PLC. The APD 4380 converts and isolates the signal. Additionally, the output can be "sinking" or "sourcing" to properly interface with their customer's PLC.

**Problem. Solved.**