

Absolute Process Instruments, Inc.

Manufacturer of Quality Signal Conditioners Transmitters & Isolators

Application Notes

- General Info
- Temperature
- Pressure
- Flow
- Speed
- Weighing
- Process

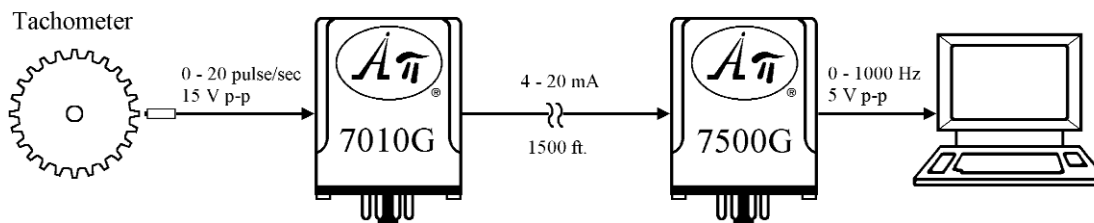
Monitoring Mixer Speed at a Remote Computer

PROBLEM

The speed of a mixing machine must be monitored by a computer located 1500 feet away, across an electrical-ly noisy area. The tachometer on the mixer produces 24 pulses per revolution at 15 V peak-to-peak and the mixer runs at speeds up to 50 RPM. The computer input accepts a frequency of 0-1000 Hz at 5 V peak-to-peak.

SOLUTION

Api signal conditioning is applied at the tachometer output and at the computer input to provide noise immuni-ty and signal compatibility.



The tachometer output ($24 \text{ pulse/rev} \times 50 \text{ rev/min} \times 1 \text{ min}/60 \text{ sec} = 20 \text{ pulse/sec}$) is converted to a 4-20 mADC signal by the **API 7010 G** Isolated Frequency to DC Transmitter module. At the computer, the 4-20 mADC signal is converted by the **API 7500 G** Field Selectable Isolated DC to Frequency Transmitter module to a frequency of 0-1000 Hz.

Did You Know...?

Api isolated transmitters have 2000 volt input, output and power isolation.

FREE APPLICATION ASSISTANCE

Call  Customer Service

800-942-0315

