

Application

Center arm pivot irrigation systems are used throughout the Midwest to minimize water use and ensure crop health.

Because the sections of the center pivot assembly have to move at different speeds, the motors moving each section must be monitored to verify each section is moving at the proper speed and time.

If any motors fail or a section does not rotate properly, the crops will not be irrigated correctly or the irrigation system may become damaged. Early detection of such failures is important to both the machinery and the crops.



Solution

With a SureCross wireless network, center pivot irrigation systems can be tracked without compromising any existing equipment.

A Node mounted at each joint can monitor the motor switches. When a pivot section has failed to move properly, a signal is sent to a Gateway mounted at a central control station.

When using a Gateway Pro or host system to collect data, a text message or e-mail can be used to notify maintenance personnel that a section of the pivot assembly has stopped working properly.

