Temperature and Humidity Monitoring for Production

Customer

Company – A global automotive supplier

Background – High humidity in the summer time and low humidity in winter affects product quality. A real-time display of conditions must be available and records of temperature and relative humidity must be kept for audit and quality purposes. Compressed air and consumption needs to be monitored because high dew points lead to pneumatic component failure.

Requirements – Maintain quality requirements by monitoring temperature and humidity in assembly room and generate text and/or email alerts for alarm conditions.

Challenges – Large facility and multiple rooms need to be monitored, making a hard-wired solution impractical and costly.

Solution

A M12FTH4Q temperature and relative humidity (RH) sensor connected to a DX80 Node transmits data to the Gateway, which is connected to a data logger. If temperature or RH thresholds are exceeded, an email or text message is sent to notify building maintenance of a pending issue.

Why Banner?

Value –

- Easy to deploy wireless sensors and Nodes
- Flexible installation, 24 V DC or battery-powered Nodes
- Gateway can handle up to 47 Nodes with a wireless network
- Ability to add additional sensors, discrete or analog
- Ability to generate text and email alerts and alarms
- Affordable cost of implementation

Expansion – With a wireless backbone already in place, the customer is economically able to expand monitoring to other assets in the facility.

Customer Benefits

- Ensures quality requirements by monitoring environmental conditions
- Displays real-time environmental conditions so employees can proactively address potential problems
- Prevents quality issues and pneumatic component failure
- Collects data to substantiate future upgrade projects and room improvements
- Reduces lost production time and materials by ensuring proper environmental conditions