

# Monitoring Door Switches Using Wireless Q45 Sensors

## BENEFITS

- Building doors can be remotely monitored
- Provides large food manufacturers a high level of confidence that the production area is secure
- Fast and easy installation

## APPLICATION

A major supplier of bulk food ingredients has recently been asked by its customer to verify the building is secure at all times. To achieve this, multiple door and window access points throughout the plant need to be constantly monitored.

## SOLUTION

Magnetic door switches were placed at every exit and entry point in the plant.

Switch status information is transmitted back to a central location so that security personnel can monitor the opening of exits that should remain closed during normal operation. Each magnetic switch is connected to a DX80N2Q45RD Wireless Q45 Sensor - Remote Device model and uses the Q45's dry contact inputs.

Multiple DX80G2M6-Q Gateways are installed throughout the plant to collect the data from the wireless Nodes and a backbone of Banner DX80 MultiHop Data Radios transmit the data back to one Modbus host system.

## RESULTS

The Wireless Q45 Sensors can be used with traditional magnetic reed switches to reliably monitor doors and windows to ensure a safe and secure food supply.

Using the Banner wireless system with MultiHop Data Radios easily transmit data even within the largest plants.

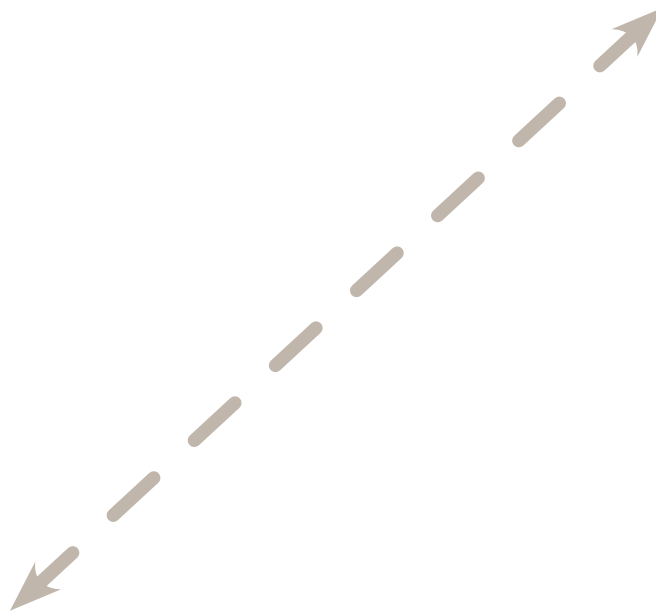


***Security personnel can monitor the opening of exits that should remain closed during normal operation.***

Please contact your local Banner Engineering representative or go to [BannerEngineering.com/WirelessApplications](http://BannerEngineering.com/WirelessApplications) for more information about this application

## GATEWAY FOR EACH WIRELESS NETWORK

Model	Description	Qty
DX80G2M6-QC	DX80 Gateway in IP67 housing Requires 10–30V dc power. Ships with power cable, 2 dB Omni antenna, mounting hardware	1
PSDINM-24-10	Power Supply, 10–30V dc	1
SMBDX80DIN	DIN-rail mounting bracket for radio and power supply (optional)	1
DIN-35-105	DIN-rail section, 105mm long, 35mm design (optional)	1
BWA-EF1086	Fiberglass enclosure, 10" x 8" x 6" (optional)	1
BWA-PA108	Enclosure subpanel, aluminum (optional)	1



## WIRELESS Q45 SENSORS AT EACH DOOR AND WINDOW

Model	Description	Qty
DX80N2Q45RD	Wireless Q45 Sensor - Remote Device Powered by an internal battery.	1