Sample Tank Level Configuration for DXM100 Models

Overview

This sample tank level application allows users to set alert ranges using action rules. A K50U Ultrasonic sensor monitors tank levels. A Wireless TL70 Tower Light uses the red and yellow lights to signal tank levels.

This configuration file starts with a basic monitoring of the battery and incoming power to the DXM100-Bx Wireless Controller. It also monitors the Universal Inputs of the DXM Controller and the time that it is operating on battery or a power supply.

In addition, the XML is designed to monitor the distance from a K50U ultrasonic sensor connected to the DXM100-Bx Wireless Controller using a Wireless Q45U Node. The results of the distance measurement are then transferred to a three-color (green, yellow, red) TL70 wireless stack light.

Tower Light Color	Description
Red	Too full — The tank level surface is less than 36 inches from the sensor face
Yellow	Nearing too full — The tank level surface is between 36 and 38 inches from the sensor face
Green	Proper amount — The tank level surface is between 38 and 48 inches from the sensor face
Yellow	Nearing empty — The tank level surface is between 48 and 50 inches from the sensor face
Red	Empty — The tank level surface is more than 50 inches from the sensor face

This provides the customer with a method for using a three-color tower light to indicate five statuses. The primary use of the Nearing Too Full and Too Full red LED status was to allow the operator time to fill the tank.

Machine operators are more concerned with the Proper Amount (green), Nearing Empty (yellow). and the Empty (red) statuses. Generally, if the green light was not on, they wanted to start filling the tank. If during the tank filing operation the tank was overfilled, they also wanted time to take corrective action.

The XML configuration file includes examples of how to use the action rules for monitoring aspects of the DXM100, and there is a schedule set up for emailing stored logs on a weekly basis.

The XML configuration file is set to push to the Banner Connected Data Solutions by Sensonix website using an LTE cellular module. To use this, you will need to modify the Site ID under **Settings** > **Cloud Services**.