

## Customer Requirement:

Assemblers at work stations need a reliable way to call for parts or service without leaving their work stations

## Banner Solution:

DX80G9M6S-PM8 Gateway  
DX80N9X6S-PM8L Node  
TL50 Tower Lights

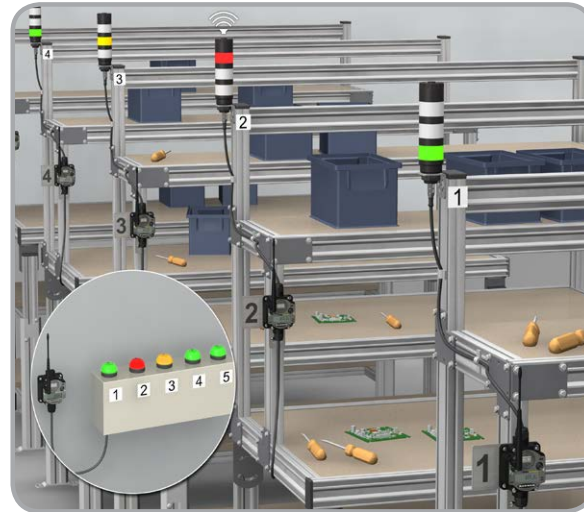
## Why Banner?

Long-range bidirectional wireless system supports up to six discrete inputs and six discrete outputs for each Node

## Customer Benefits:

**Improved Performance** – Reduced work cell downtime, increased production efficiency, and provides accurate metrics

## Banner Wireless Enables Call for Parts/Call for Service



*A wireless I/O Node, light, and push button at each work cell location allows workers to call for more parts without having to leave their work stations.*

## Background

To improve efficiency, assemblers at work stations need a way to call for parts and service that doesn't involve them leaving their work stations.

Getting parts more quickly would improve production efficiency, and using a system of remote indicators would let the supervisors to see the status of each work station, allowing the supervisors to fix production problems quickly and to collect production metrics.

## Challenge

Because the work cells were frequently reconfigured, physical I/O wiring was difficult and expensive. Some work cells are on the other side of the plant, making range is an issue for many wireless systems.

A bidirectional I/O system was required because some work cell locations required outputs as well as inputs.

## Solution

Banner PM8 wireless system was chosen as the most suitable wireless architecture because it had exceptional range for an industrial environment and offered a wide range of I/O signal types available for future needs.

PM8L Nodes with 6 discrete inputs and 6 discrete outputs were installed at each operator station. The I/O from the Node was wired directly into a local push button and light to allow the work station operator to send signals to the supervisor. This system also allowed the supervisor to send signals back to the work station from a PM8 Gateway.



*SureCross PM8  
Gateway*

## SureCross Wireless I/O Network:

- Long-range wireless network communicates through entire plant
- Operates using 10–30V dc
- Reliable data transmission via FHSS technology and TDMA control architecture
- Bi-directional communication between the Gateway and Nodes with fully acknowledged data transmission

## Learn More:

Visit [www.bannerengineering.com](http://www.bannerengineering.com) for product information and to locate a distributor

- [SureCross PMx Gateways and Nodes](#)