Improve your processes with wireless signal tower monitoring

Intelligent, cost-efficient alternative to complex Industrial data collection systems

WD-Z2 Wireless Data Acquisition System
IloT, Industrial Internet of Things, a term that has become more than just a buzzword but a way of the future.

IloT provides businesses with the ability to access and monitor plant-wide manufacturing data for operational visibility, predictive maintenance and interconnectivity among machines, components and people. This achieves Kaizen, enabling businesses to continuously improve their processes and quickly solve problems as they arise.

The WD System is a revolutionary low-cost, IloT add-on, allowing PATLITE Signal Towers to transmit wireless operational data, based on its physical, visual and audible alert system. Seamlessly acquire and view real-time machine data, irrespective of the age or type of machine, to prompt immediate responses from operators.

Predicting maintenance, identifying bottlenecks and increasing OEE (Overall Equipment Effectiveness) on the factory floor is now simpler than ever.
CASE STUDY 1

BEFORE
Production bottlenecks are being caused by machine down time and uneven production flow. To address this issue, we are manually creating daily machine reports which are tedious and inaccurate.

AFTER
The WD system enables us to monitor our line in real-time, quickly identify bottlenecks and address them. We can also determine the severity of machine issues for more effective predictive maintenance.

CASE STUDY 2

BEFORE
We operate several manufacturing facilities in different locations and have no system in place to remotely monitor machines in real-time. Our goal is to share productivity among our facilities to improve company wide productivity.

AFTER
The WD system allows us to monitor all lines in all locations remotely and in real-time. Workers are able to better understand how their efforts affect the bigger picture improving company wide productivity.

CASE STUDY 3

BEFORE
Maintenance calls from our manual assembly stations are only visually displayed on signal towers. When a supervisor is away from their station or site, delays and production bottlenecks occur.

AFTER
With the WD installed in workstations, supervisors can now receive email alerts for maintenance calls when away from the site, greatly reducing bottlenecks.
Third Party Software Suite

View health of production operations in real time and receive live updates on any status changes

- Display effective utilization, stop times, and abnormalities for each device
- Immediately visualize equipment that are no longer efficient
- Customize display settings for various application preferences

Check operation history for each production unit in a graphical detailed display

- View numbers in analog graphs or digital numbers to clearly view efficiency percent over a period of time
- Easily check long term adverse equipment to make educated administrative decisions for factory improvement
- Set alerts for machine downtime based on severity level or time duration.

Signal Chain Demo Site - bit.ly/schaingdemo
Login: user01
PW: kaizen-iot

Signal Chain is a third party software suite and not an official product of PATLITE Corporation
Network-enable your machines
WD Transmitters easily attach to compatible PATLITE Signal Towers and enables wireless data transmissions to a WD Receiver.

Wireless Communications System

**ROUTING FUNCTION AUTOMATICALLY SELECTS OPTIMUM COMMUNICATION ROUTE**
Multi-hop mesh networking allows the WD system to adapt to various environmental conditions when transmitting data by selecting the best route for radio wave communications. Even if the floor layout of the equipment is altered, data communications will resume normally.

**ZIGBEE WIRELESS 2.4GHz MESH NETWORKING FOR ACCURATE AND RELIABLE COMMUNICATIONS**
The WD system does not require complicated wireless or network settings. The system automatically and continuously selects the best routes to send data through to ensure stable data transmission.
Included WDS-WIN01 Software

MAKES IT EASY TO SETUP WIRELESS COMMUNICATIONS WITH SIGNAL TOWERS ON THE PLANT FLOOR

- User-friendly software interface for easy operability
- Allows users to acquire equipment data from remote locations
- CSV data logger (license required)
Monitor the operation status of the entire production floor in real-time

- Display production times, stop times, and count functions for each device
- Instantly discover production bottlenecks at a glance
- Each display module can be customized to your application and floor plan
- Able to output display to a larger monitor for a clearer visual system

Check operation history for each production unit in a graphical display

- Realize immediate areas for improvements by seeing the difference in time between normal operating mode (green) and stopped operating mode (red or orange)
- Visualize the units that have a normal operating run time and other units that will need to be stopped more often due to inefficiency

Flex Signal Demo Site - bit.ly/flexsignal

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